THE MEDICAL TIMES.

MONDAY, JANUARY 2, 1871.

ORIGINAL LECTURES.

CLINICAL LECTURES

ON THE TREATMENT OF STRANGULATED HERNIA.

BY S. D. GROSS, M.D., LL.D.,

Professor of Surgery in the Jefferson Medical College of Philadelphia.

No. III.

IN my last lecture I called attention, in a general manner, to herniotomy and to the proper method of restoring the protruded structures to the cavity of the abdomen. The subject next to be discussed is the condition of the strangulated parts, with a view of ascertaining whether they can with safety be returned to their natural situation. I shall assume, for the sake of illustration, that the hernia consists both of bowel and omentum.

In all cases of strangulation, even if only of very short duration, the protruded structures must necessarily be more or less inflamed and changed in appearance. The alterations are generally in proportion to the violence of the constriction rather than to its duration. Hence they are usually most conspicuous in recent herniæ, small in size, and attended with severe suffering. The principal morbid conditions are injection of the capillary vessels of the protruded parts, with more or less discoloration, infiltration, softening, ulceration, and gangrene, effusion of serum and lymph, enlargement, and adhesions.

The injection of the vessels is always more distinctly marked in the bowel than in the omentum, owing to the difference in their vascularity. In strangulation of the intestine it is at first of an arborescent character, but it soon becomes capilliform, and, in severe cases, even punctiform or blotchlike, from the escape of blood into the subserous cellular tissue. These changes deserve attention, inasmuch as they are expressive of different grades of severity in the constriction. An arborescent arrangement of the vessels is denotive of a milder degree of inflammation than the capilliform, the capilliform than the punctiform, the punctiform than the maculiform or ecchymotic. Upon the shades of color dependent upon these various forms of vascularity are founded important indications of treatment. When the injection is arborescent, the constricted bowel will either be red, or red verging upon purple, and there can be no hesitation in regard to the propriety of restoring it to the cavity of the abdomen. In the capilliform injection the serous layer will be of a deep purple, modena, or livid aspect, either uniformly or in patches of variable extent, showing that the inflammation has made greater strides. In the punctiform, maculiform, or ecchymotic vascularity there is always an actual effusion of blood into the subserous cellular structure, showing that the coats of the vessels have given way, and that there is more serious disorganization of the bowel, rendering it perhaps questionable whether it should be replaced or retained in its extra-mural situation. As a general rule, it may be assumed that mere discoloration, however great, even if it is black and uniformly diffused, is no evidence of gangrene. The circulation is only impaired, not completely arrested, and the bowel may therefore be returned without risk of evil consequences. It is otherwise when, to great discoloration, there are superadded structural changes, as softening and infiltration, total stagnation of the blood, coldness of the protruded parts, and copious effusions of lymph and serous fluid of a dark hue, from the presence of hematin. In such a case the proper plan, after the division of the stricture, is to wait a short time, with a view of seeing whether there will be a restoration of the circulation, the bowel being in the mean while carefully fomented with a soft sponge or cloth wrung out of warm water. From ten to fifteen minutes may often be profitably spent in this manner. If at the end of this time there is no evidence of reaction in the part,—no sign of returning life in the vessels,—the only course to be pursued is to open the bowel and establish an artificial anus. To replace it into the abdominal cavity would under such circumstances be almost sure to be followed by fatal peritonitis, if not by actual rupture of the tube and an escape of its contents.

Marked blackness does not, I repeat it, in itself constitute a sufficient reason for not returning the protruded bowel. It is only when it is conjoined with the other phenomena above described that there should be any hesitancy about it. To show how harmless such a condition really is, I may here briefly relate a few particulars of a case which came under my observation last July:

A woman, forty-five years of age, of delicate frame, but at the time in good health, was suddenly seized, while engaged in some housework, with strangulation of an inguinal hernia the very existence of which she had almost forgotten. She had formerly worn a truss, but for several years past its use had been abandoned, and she gave herself no concern about her rupture, as it was very small and seldom protruded. On the occasion referred to, the bowel suddenly descended, and she found it impossible to push it back. Her family physician, who was soon after sent for, was equally unsuccessful, after repeated and persevering efforts. She spent a restless night, suffering intense pain in the abdomen, especially in the region of the tumor, and vomiting almost incessantly, although she did not, so far as could be ascertained, eject any fecal matter. I saw her the next morning at eight o'clock, twenty hours after the commencement of the strangulation. The tumor, about the size of a small goose-egg, was exquisitely tender and intolerant of the slightest manipulation. To employ the taxis was out of the question; and I therefore, as soon as the patient was thoroughly anæsthetized, laid the tumor open and divided the stricture, which was one of unusual tightness. The bowel was completely black; but, as it was free from softening and infiltration, I unhesitatingly returned it. A large dose of morphia being administered, the woman soon became tranquil, the vomiting ceased, and the pain promptly disappeared. Under the use of hot anodyne fomentations, the abdominal tenderness also gradually subsided. The bowels were relieved by an enema of turpentine on the fourth day; the wound united nearly in its entire extent by adhesive inflammation, and recovery occurred without one bad symptom. It is an interesting fact that in this case there was no effusion of lymph; but the quantity of serous fluid was unusually large, and, what was singular, it was divided as it were into two distinct portions, the superficial being perfectly clear and limpid, while the deep, or that nearest the stricture, was of a dark, almost black, color.

Ulceration of the bowel may be present and yet the discoloration be comparatively slight,—not such as would in ordinary cases cause any serious apprehension as to the result. If the stricture is very tight, as so often happens in very small, recent herniæ suddenly strangulated, the coats of the tube readily give way under the excessive pressure, generally in little circumscribed spots, perhaps not larger than a millet-seed or split pea. In rare cases the entire circumference of the tube is eroded or fatally indented, the part looking as if it had been tightly compressed by a ring. The treatment of such occurrences is sufficiently plain. Any little openings that may exist are included in a well-waxed ligature, the ends of which are cut off close to the knot, when, the stricture having been relieved, the bowel is returned to the abdominal cavity. Such a proceeding is the only correct one, provided the perforations are

not numerous or large. When this is the case, the proper practice is to incise the bowel and establish an artificial anus. This course is especially necessitated when along with ulceration there are deep discoloration and copious effusion of black-colored serosity, indicative of violent inflammation. The ligature used in these operations gradually finds its way into the intestine, and is finally discharged along with the feces.

The appearance of the fluid contained in the hernial sac is of great diagnostic value with reference to the amount of injury sustained by the protruded structures. If it be limpid, or nearly so, it is an infallible sign that the constriction has been comparatively light, and that, consequently, the parts have not suffered any serious injury. On the other hand, a dark, blackish serum invariably implies the opposite of this condition, often causing doubt as to whether the bowel should be returned or left in its unnatural situation. In the case above described, where the constriction was very firm, the fluid, more than ordinarily abundant, was divided as it were, singularly enough, into two distinct portions, a black and a limpid, and the bowel was so much discolored that, if I had not had some experience in such matters, I might have had some hesitation about the propriety of returning it.

It is not often that the bowel is materially, if at all, enlarged in strangulation. Such an occurrence can never happen in a recent hernia—hardly, indeed, in an old one, at least not to any extent—unless the protruded part consists of the large bowel, especially that portion which is provided with epiploic appendages, which now and then, under the influence of long-continued irritation, become more or less hypertrophied. Should the enlargement be so great as to interfere seriously with the return of the tube, the best plan will be to let it remain in its abnormal position.

Slight impediment to reduction occasionally arises from œdema of the coats of the bowel from effusion of serum into the connective tissue, especially the subperitoneal. Gentle but steady compression, with the free division of the stricture, will generally effectually surmount the difficulty.

I have known a twisted condition of the bowel to interfere with restoration. Should such a condition exist, gentle manipulation will easily relieve it.

Firm adhesions, incompatible with the ready restoration of the bowel, rarely occur in young herniæ, however tight the strangulation. Fibrin may exist in large quantity in such a case, but it is too soft to offer any serious barrier to reduction. The slightest pressure of the finger or of the handle of the scalpel is sufficient to break it down. It is different when the rupture is old, or when it has been the subject of protracted irritation: then the adhesions are often exceedingly firm, and the utmost care may be required in liberating the parts. Indeed, cases occur in which this is altogether impracticable, notwithstanding the most adroit and patient efforts. The best instrument for effecting severance is the finger: when this fails, recourse must be had to the knife, used with the utmost possible circumspection, lest serious mischief befall the bowel.

The adhesions may be situated, first, between the bowel and sac, between the bowel and omentum, or, lastly, between the two coils of intestine. In old herniæ the bowel and sac are sometimes firmly adherent to each other and to the neck of the rupture, and all attempts to effect reduction in the ordinary way are ineffectual. Under such circumstances, it has been advised to divide the parts in such a manner as to establish an artificial anus, an injunction generally more honored in the breach than in the observance. A little care and patience will usually enable the surgeon to detach the sac from its connections, so as to allow the stricture to be safely approached with the knife.

When the adhesions exist between the bowel and omentum, great care is required; otherwise the attempt to effect severance may occasion serious injury. It sometimes happens that the bowel is completely surrounded by a fold of omentum, so as to mask more or less thoroughly the nature of the case. In such an event an incautious stroke of the knife might readily inflict a wound upon the imprisoned tube, followed either by an artificial anus or by fatal peritonitis.

Although the coats of the bowel are rarely in any case enlarged, great embarrassment is sometimes experienced in the reduction from the distention of the gut by the presence of an inordinate quantity of gas, or gas and feces. Here patience and perseverance will be required, and will be likely to be crowned with success, gentle, steady pressure usually sufficing for the purpose. When the effort fails, a delicate trocar, as fine almost as an exploring-needle, is inserted, and the gas drawn off, when the more solid matter may commonly be pressed up without any difficulty.

The management of a strangulated omentum must be conducted upon the same general principles as that of a strangulated bowel. An omentum in this condition exhibits comparatively little change of color, differing in this respect greatly from a strangulated intestine. It may be of a bluish, lilac, purple, or brownish hue, but under no circumstances, however severe the constriction, is it of a livid or black color. The vessels may be deeply injected and much enlarged in consequence, but there is no capilliform arrangement of them; and it is very uncommon to meet with maculiform or ecchymotic blotches, except when the parts have been severely contused in the employment of the taxis. A considerable degree of softening is occasionally present, and this occurrence, superadded to the complete stasis of the blood in the engorged vessels, is generally the best criterion of the existence of gangrene. Important light will of course be furnished by the state of the bowel and by the nature of the effused fluids in the hernial sac. It is seldom that one structure escapes when the other is affected with gangrene. Both usually die together,—omentum often before bowel, owing to its more feeble vitality.

The only treatment adapted to a gangrenous omentum is excision of the affected structures and ligation of their vessels, each one being included in a separate ligature, one end being cut off close, and the other brought out at the wound. Such a course is proper even when there is merely a suspicion of the existence of mortification; since it is far better, so far as the safety of the patient is concerned, to retrench the constricted parts than to run the risk of returning them in a condition in which, if they are not actually dead, they may perish after their replacement, and thus inevitably occasion fatal peritonitis. There is one precaution of great moment in excising a gangrenous omentum which cannot be too forcibly inculcated. It is to prevent the sudden retraction of the stump into the abdominal cavity, where, if the bleeding vessels have not been properly secured, an annoying, if not dangerous, hemorrhage might occur. Holding the parts with the thumb and finger, a volsella or a ligature will generally be quite sufficient for the purpose.

Some surgeons, instead of excising the gangrenous structures, allow them to remain in the wound, to be detached by sloughing. Such treatment, although generally perfectly safe, inasmuch as the living parts usually speedily become adherent to the surrounding tissues, is commonly followed by a tedious process of cicatrization, if not by worse consequences, as colicky pains and disagreeable dragging sensations, long after the cure is completed.

Excision of the omentum is sometimes required on account of an enlarged and indurated or hypertrophied

condition of the protruded parts. Such a contingency is almost peculiar to very old ruptures, in which the dislocated structures, from long-continued pressure, have acquired a bulk altogether disproportionate to the opening of descent, and where, consequently, reduction cannot be effected without a certain degree of retrenchment. When, in addition to the hypertrophy, the parts are firmly adherent, the most judicious plan is to let them remain intact, provided they do not interfere with the restoration of the bowel; since, when the wound is healed, they may serve to plug up the opening in the wall of the abdomen, and thereby prevent further protrusion. Mere adhesions of the omentum, of an ancient date, should be managed upon similar principles. Recent ones, on the contrary, should be carefully severed, as they usually may be with a little effort of the finger or the handle of the scalpel.

I now come to speak of some of the varieties of herniotomy. In the preceding lecture I described the more common operation, at least so far as the surgeons of this country are concerned,—namely, that in which the sac is opened. The operation in which the sac is left unopened was originally performed by J. L. Petit in the early part of the last century, and is fully described in his posthumous work entitled "Traité des Maladies Chirurgicales," published in 1774. He was led to adopt this procedure from having noticed that the ordinary operation was frequently followed by the death of the patient, and he concluded that the principal cause of the mortality was the exposure of the protruded viscera to the air, and the rough manipulation to which, in this nude state, they were subjected in the efforts at restoration. He therefore thought it was better to divide the stricture without opening the sac than to pursue the usual routine practice; and the result of his experience fully justified the wisdom of his decision. The operation of Petit is strictly subcutaneous, and is the earliest method of the kind upon record, antedating that of Stromeyer for the cure of club-foot by upwards of a century.

The operation of Petit met with little favor from the profession until upwards of one hundred years after he first performed it. Most of the French, English, and German surgeons of the last century condemned it on account of its supposed dangers. Dr. Monro, secundus, of Edinburgh, published four cases in which he successfully employed it; but, although he spoke of the operation as far superior to the ordinary one as a safe procedure, his remarks seem to have attracted little, if any, attention in Great Britain. Sir Astley Cooper, in his great work on Hernia, recommends Petit's method in large and old ruptures, and gives the result of several illustrative cases. In 1829, Mr. Aston Key, of London, in a clinical lecture, fully discussed the value of the operation; and in a memoir on the advantages and practicability of dividing the stricture in strangulated hernia on the outside of the sac, issued in 1833, he strongly advises its general adoption. Since that period the operation has met with more or less favor both in Europe and this country, in the latter of which, however, it has apparently attracted less attention than its real merits deserve. To show the differences in the result between the ordinary procedure and that in which the sac is left intact, I may state that of 774 cases of the former analyzed by Mr. Gay, of London, from private and public practice, 334, or about one-half, perished. Of 185 cases, collected by different operators, in which the sac was not opened, only 36 died,—furnishing thus a much smaller death-rate, or only about one in four. It is to be regretted that there are no reliable statistics of Petit's method on a large scale, so that a very full comparison of the mortality of the two procedures might be instituted.

The operation of Petit is not without its disadvantages, and it has even been asserted that its evils more than counterbalance its benefits. This, however, is certainly, as we have just seen, not the case. The objections are, first, the difficulty, if not utter impossibility, of ascertaining the precise condition of the protruded viscera; and, secondly, the fact that reduction must always be effected in mass. If the parts should be returned in an ulcerated or gangrenous condition, fatal peritonitis will be inevitable; and the result will hardly be less disastrous if, when the viscera are replaced in mass, there is, as not unfrequently happens, an internal stricture, or, at all events, such a state of things as to interrupt effectually the transmission of the contents of the bowel. Besides, as the protruded parts are returned together, a much freer division of the stricture is generally required than when they are reduced separately. Finally, I am not at all certain that when the case is treated in this manner there may not be some risk of peritonitis from the irritating effects of the serous contents of the hernial sac, especially when they are very abundant and high-colored. The peritoneum, naturally very sensitive, is always greatly fretted in strangulation, and ready to resent any encroachment of foreign matter, even when it consists of its own secretion.

It is not easy to point out with any degree of exactitude the class of cases to which this operation is more especially adapted. Sir Astley Cooper thought that it should be restricted mainly to large and old ruptures; and there is no doubt, I think, that such cases generally fare better than small and recent ruptures, as the protruded viscera are usually less damaged, and therefore in a more suitable condition to be returned with impunity. When the hernia is very young and the strangulation uncommonly rapid and severe, I believe that the safest practice generally is to open the sac and to replace the parts separately. Such a course is especially indicated when the pressure has been concentrated upon the neck of the sac.

Subcutaneous division of the stricture is occasionally practised. The plan, so far as I know, was originally suggested by M. Bouchut, a French surgeon, but it has never met with much favor, either abroad or in this country. My colleague, Professor Pancoast, if I mistake not, has employed it upon several occasions; and in the hands of a man of such well-known skill the procedure might be perfectly safe; but this could hardly be said of an ordinary operator. The danger of wounding the bowel must be great, even when the utmost care and skill are exercised. The procedure is literally a blind one, and I have, I must confess, no particular fancy for its employment.

The principal accidents in herniotomy are two,—hemorrhage and wounding of the bowel. The bleeding is generally very trifling, and seldom requires any particular attention. Occasionally, however, it is quite serious and even alarming, depending upon the division of an artery or vein of considerable size,—as, for example, the epigastric or obturator. When this is the case, the proper plan is to expose the vessel and secure it with the ligature, or, if this be impracticable, to control it, if possible, by acupressure, by means of a pair of spring-forceps permanently retained in the wound until a firm clot has formed, or by digital compression maintained by a relay of assistants. Ice, Monsel's salt, and exposure of the wound to cold air are also worthy of trial. I have myself never met with any unpleasant occurrence of this kind, and there will, I am quite sure, be seldom any trouble if proper care be taken in dividing a stricture, the smallest incision generally sufficing to liberate the protruded structures.

A wound of the bowel can only be avoided by proper care in exposing and opening the hernial sac. Should such a contingency arise, the opening should at once be closed with Lembert's suture, the stitches being

sufficiently near each other to protect the parts from fecal extravasation. It is only when the wound is uncommonly large and the intestine in a very diseased condition that the injured structures should be left in their extra-mural situation.

ORIGINAL COMMUNICATIONS.

THE APPLICATION OF LOCALIZED MOVEMENTS

TO THE TREATMENT OF CERTAIN FUNCTIONAL NERVOUS DISORDERS.

BY WM. R. FISHER, M.D.,
of New York.

(*Continued from page 76.*)

PART II.

THE muscular system, when it is the seat of manifestations of this condition of nervous depression, more frequently assumes a state of pseudo-paralysis than of spasm.

Case IV.—Mrs. B. C., 50 years of age, an intelligent lady, whose temperament was decidedly sensitive and excitable, had been in poor health for many months, and had undergone a variety of treatment, both local and general, for uterine disease. After suffering severely from excessive menorrhagia, a small polypus was discovered by her attending physician to be protruding through the os uteri. It was removed, and the vagina was packed with a tampon of lint. When the proper time arrived for withdrawing this plug, the physician, unfortunately, was not thorough in his work, removing only some fragments, and allowing a large mass to remain. An offensive discharge was soon set up from the vaginal mucous membrane, the strength of the patient began to fail, and profound constitutional disturbance was exhibited. For three weeks she continued to grow worse, when a fetid mass was expelled from the vagina while she was at stool, and following its removal there was at once a decided improvement in the serious symptoms which had been developed. But, to the surprise of her physician (at this time a prominent homœopath), she began to lose control of her legs; and, as the loss of power steadily increased, he was discharged and Dr. Taylor summoned to the case. An examination showed that while sitting in her chair she could execute every movement with considerable force in each leg; but when asked to walk she seemed almost incapable of exerting her muscles in the lower extremities, though her efforts to prevent herself from falling by clinging to her husband gave evidence of abundant power elsewhere. The diagnosis in this case had been paralysis from pyæmia; but it is needless to say there were no symptoms of pyæmia; nor was there paralysis, properly speaking. A favorable prognosis was given, and the family were told that her condition was not dependent upon any organic change in the nerve-centres or their distribution, but was simply an indication of a loss of consciousness of power, arising from the shock which had been gradually inflicted upon her by her prolonged illness, with its repeated hemorrhages and the subsequent exhausting discharge; that, though the pseudo-paralysis was curable, no treatment could be recommended until signs of reaction were manifested, and that probably she would sink still deeper into a state of helplessness before that time. Within a week she was unable to move her legs at all when placed in the upright position, and was in general much more feeble. She was then brought to our institution, put to bed, and all her friends were rigorously excluded. For a month she continued to lose ground. She became greatly emaciated, lost all power of motion in her arms and legs, and at times could not articulate distinctly; her muscular sense was also impaired in the lower extremities, so that sometimes she could not tell their position. But no treatment whatever was applied during the continuance of this condition of prostration; and, as had been predicted, reaction last was established without interference. It requires the utmost resolution to stand by idly and watch the downward course of such a patient, while her friends are anxiously urging us to employ some active means to check it; but experience has shown that the expectant plan is by all means the best to be pursued. Medicine has no drug that will supply the place of absolute rest and quiet in this state of depression; but the powerful nervines and stimulants which are often recommended may frequently produce the most injurious effects. As soon as her returning strength would warrant, she was placed upon her feet in the peculiar manner which we employ, and after a treatment of ten weeks was discharged entirely cured.

The first attempt to place a feeble patient in the erect position by the method ordinarily employed is usually followed by complete exhaustion. The physician, in lifting her from the bed to the floor and striving to sustain her weight upon his hands placed under her arms, leaves the back and limbs entirely unsupported. Her knees and hips yield to the unaccustomed weight which is thrown upon them, and a struggle ensues in the attempt of both parties to prevent her from falling, which usually results in a strong disinclination on the part of the physician to repeat the experiment, which is heartily reciprocated by his patient. The means which we adopt when first placing our patients with functional loss of power upon their feet obviate these difficulties completely. A pair of light steel braces, attached to shoes and running up on either side of the leg to the middle of the thigh, with knee-caps to prevent flexion at this joint, are placed upon the lower limbs. The patient is then brought to the edge of the bed, a strap is passed around her hips and thence around the body of the physician, who stands by the bedside, and she is gently raised up and placed upon her feet. Her legs are supported by the braces, her knees are prevented from bending, while her hips and body are sustained by the strap and the hands of the physician. If there be a tendency to sink down under the emotional excitement which is usually produced by the assumption of this novel position, it is immediately checked by the supports which have been supplied at all the weak points, and the patient feels that to fall is an impossibility. The physician slowly steps back, inclining to one side with a rolling motion, and, gently drawing the opposite side of her body towards him, her foot advances. This is repeated with each foot alternately as long as seems to be judicious, and the patient is returned to her bed. The moral effect of this procedure upon such a case as we have described, to be appreciated must be witnessed. The fact of standing once more, after a long confinement to the bed, imparts an exhilarating influence throughout the system which cannot be as quickly attained in any other way, and amply repays for the increased suffering which may have been called forth in acquiring it. Each day these walks are repeated, and, by extending their length and gradually diminishing the support, the tonicity of the muscles of the trunk and extremities is improved, a corresponding regularity in the manifestations of nervous action is established, and the patient advances steadily to recovery. As the object of this treatment is not to bring about muscular development by exercise, but to correct functional derangement of the nervous system, considerable tact is requisite in regulating the frequency and duration of these exercises, to avoid overtaxing a system which is already much enfeebled; and the physician should constantly bear in mind that his treatment must be regulated by the condition of his patient, and not by any set rules. Sometimes the effect of standing for the first time after a long interval is an overwhelming prostration which approaches syncope. When this occurs, the patient is to be immediately returned to the recumbent position and left alone.

A short interval of rest will invariably bring about a return to the ordinary condition, and a second trial will probably be more successful.

Case V.—The first case reported in the article already referred to* is an admirable instance of the loss of consciousness of power without complication; and, as the lady has again been under our care with a return of the former condition, her case may here be introduced in illustration. After her recovery from the first attack she enjoyed excellent health for nearly two years; but during the winter of 1869 her father fell ill of a lingering disease, which terminated fatally in the spring. She was much harassed in body and mind during the many weeks of constant nursing and anxiety which she passed at his bedside; and when his death removed the incentive to exertion which had sustained her up to that time, her enfeebled powers rapidly yielded under the burdens which she had unremittingly heaped upon them. She began to lose the sense of power in her left leg, which had in the former instance been the more affected, and rapidly the "paralysis" became complete. She was then removed to our institution, and under the usual treatment was soon able to walk about without assistance. Her ankle, however, remained weak for some time after, probably from the dragging of the foot, which in the first attack had lasted for more than a year; but a light brace worn within the shoe as a support was an effectual remedy. Had she been submitted to proper treatment in the commencement, this would not have been required.

There are two points of interest which this case presents for consideration. In the first place, the origin of the loss of power in both attacks was essentially the same,—a shock acting upon an enfeebled state of body. In the first the exciting cause was diphtheria; in the second it was domestic affliction; and the similarity of the resulting effects tends to show that the opinion expressed as to its true nature was correct. Secondly, the treatment was the same in both attacks, and was attended in both with recovery, which is additional evidence in favor of the unity of origin. The essence of this condition, as we have already stated, lies in an abnormal state of perception and volition, and a plan of treatment, to be successful, must be applied to the restoration of the perverted functions to their natural relations. So long as a patient affected in this manner is kept in bed and internal remedies are alone administered, there is not likely to be any appreciation of the presence of power in an affected part; for our ability to put forth muscular action is under all circumstances in direct relation to our consciousness of strength, and not to the actual amount of capacity existing at the time. A feeble man, under the influence of fear or impending danger, will accomplish without difficulty a feat of strength which he is utterly incapable of repeating by any effort of the will when relieved of the emotional excitement, simply because he has already measured the extent of his muscular power under ordinary circumstances, and his consciousness assures him of certain failure if he endeavor to exceed it. So it is when a disordered nervous system has communicated to the mind the impression that a limb has suffered a loss of motility. An effort to perform the natural movements can never actually be made under such circumstances, no matter how urgently it be desired; for failure is a foregone conclusion. In the case of muscular spasm which has been quoted, it was seen that movements directed to the rigid limb increased the contraction of the muscles, by directing the volition still more forcibly to the part; but when a state of relaxation exists, arising from an enfeebled consciousness of power, such movements are eminently applicable. It will not answer, however, to rely upon kneadings, rubbings, or passive movements, in these cases; for the object should be to direct the volition to the relaxed tissues, and by so doing to correct the false impressions which are transmitted from them to the sensorium. The patient must take an active part in the treatment, while the physician should direct and regulate the efforts which are put forth, so that there shall be a positive result attained, no matter how slight, to convince the mind of the existence of power. It is rarely that complete inability is to be found in these cases; but sometimes it is so nearly approached that we are compelled to commence with the last articulations and slowly advance to each joint in succession; but there is probably no instance of functional derangement of this character so deeply impressed that it cannot be removed in time by a judicious application of the principle which we are considering.

The paralytic forms usually present certain distinguishing features which enable an intelligent practitioner to contrast them with paralyses arising from organic lesions. The onset of the symptoms, together with the presence of manifestations which cannot be referred to any known disease of the nerve-centres or their distribution, is in most instances sufficient to arrest the attention and direct it to closer observation. Where there is inability to use the limbs in walking, it will often be found that the necessary movements can be effected with accuracy and force while the patient is in a recumbent position, and if she be lifted from the bed there will be a considerable amount of power exhibited in the legs in the endeavor to save herself from falling. In cases where there is inability to lift the foot from the bed, a little management will often reveal the fact that the limb is moved in turning the body from side to side, and the patient is also frequently able to raise the body from the bed to the sitting position, without assistance. The voluntary movements are principally affected, the instinctive and unconscious much less so; and, therefore, in treatment we should depend largely on securing the assistance of the latter as a means of gradually affecting the perception and directing the volition to its proper functions. Another peculiar feature in such instances is that the diminished power in the parts affected is often accompanied by increased action in the muscles in the immediate vicinity which are not involved. There seems to be a distinct barrier to the transmission of the will beyond a fixed point. There is seldom any indication of deficient nutrition in the tissues which lie beyond, as compared with the rest of the body; and, though there may be impairment or exaggeration of the natural sensibility of the skin, the electro-muscular sensibility and contractility will be normal. Lastly, the failure to relieve the condition by the usual medication prescribed for the organic affections which are simulated, and the improvement which immediately follows upon treatment directed to the correction of impaired volition and abnormal perception, complete the series of diagnostic points which, under ordinary circumstances, should render a recognition of the true pathology of the affection in question a matter of almost absolute certainty.

But, where functional nervous diseases exist in the uncomplicated and localized forms which have hitherto been considered, the difficulties in diagnosis are slight and the indications for treatment are simple as compared with the instances, too frequently met with in medical practice, in which the manifestations of impaired innervation are more generally distributed. The unfortunate class of "bed-ridden women" is chiefly made up of cases which present the peculiar condition of absence of the recognition of existing power throughout the body, with consequent impairment of volition to a marked degree. This is their distinguishing feature, while the "hysterical" symptoms which often attend it are merely accessory; and no method of treatment can be successfully employed to restore the perverted

* *Psychol. Journal*, April, 1868.

functions without a clear appreciation of the absence of organic disease, and a direction of the means to the correction of the false impressions which are received by the mind, by demonstrating to the patient the existence of physical powers which she supposes to have been irretrievably lost, while in reality they are merely latent.

Case VI.—A young lady, of a susceptible temperament, in whom the emotional faculties were largely developed, residing in the eastern part of this State, when first seen by Dr. Taylor, in May, 1868, presented the following history. She had never enjoyed robust health, but even as a child had been delicate and incapable of physical exertion. About two years previously a load of care and responsibility had been thrown upon her by the fact that her mother became incapacitated by illness from attending to her accustomed household duties at a time when they were more than usually laborious. Her powers had yielded considerably at the time to the steady, monotonous strain. A trifling increase in her labors was invariably followed by severe headaches, and she began to suffer from weakness and pain in the back. After a few months of this life, her failing strength had received an additional tax from an accidental injury of the head, which had confined her to the bed for several days. Still she had continued in the exercise of her domestic duties, struggling to bear up under her increasing weakness and sufferings, until, in August, 1867, she had experienced a complete prostration of her strength, and had taken to her bed, from which she had not since arisen. The attending physician had pronounced her to be suffering from an attack of spinal meningitis, and had tortured her back with blisters, cups, and setons, with no effect beyond an aggravation of her sufferings. When Dr. Taylor saw her, she was lying in a darkened room, on account of excessive photophobia, and her sense of hearing was so much exalted that a passing footstep occasioned the acutest distress. Her head and back were subject to intense hyperæsthesia, which to a slighter extent pervaded the body and limbs. Her digestive apparatus was completely disordered, and she was consequently much emaciated. She was so feeble that she was unable to raise herself from the bed, and an attempt to effect this on the part of her attendants produced a distressing disturbance throughout her system. A careful examination failed to detect any organic disease, beyond a slight prolapse of the uterus, with a small amount of leucorrhœa; but, as these had originated during her confinement to the bed, they were justly set down as symptoms of general exhaustion. In this case the gradual depression of the nervous force and corresponding impairment in function are clearly traceable to causes in constant action to produce them. The patient is a bright, intelligent girl, of quick susceptibilities, with a delicate organization. She is subjected to repeated strains upon her physical and mental powers throughout a long period, and with each increase in the disturbing causes we observe a corresponding enfeeblement of her vitality, until finally her organs of special sense and digestion, her uterus and her muscular system, become the seats of apparent local disorder, and, succumbing beneath the accumulating burden, she is "bed-ridden." It cannot be supposed that any organ in particular is the chief offender, by attention to which the resulting symptomatic disturbances are to be removed; for treatment directed to this end by able medical men, from time to time, has been futile. But the following treatment has restored her to health. She was told, in simple language, that she was not the victim of any organic disease, but that the morbid sensations and irregularities in function in various parts of the body, which gave rise to so much distress, were mere indications of a profound depression of her vital forces, involving a want of reciprocal action between the functions of the muscular and nervous systems. That the former was inactive, and the latter seemingly in excessive action, were explained to be the natural and usual conditions under such circumstances; and she was shown that treatment could not be applied to any one region to the exclusion of the rest, but must be one which would gradually restore that equilibrium which had been disturbed, and slowly elevate together her impaired forces to their normal relation. Her inability to exert her muscles and to bear the sunlight, her headaches and other symptoms, were accepted as existing facts, and, while no attempt was made to explain them away or to attribute them to an excited imagination, she was assured that they would disappear under a persistent employment of a rational treatment. Her faith in the efficacy of any plan was sorely shaken by the remembrance of the repeated failures which had attended the efforts of her former medical advisers; but this simple explanation of the nature of her condition established at last a feeling of confidence and reliance in her physician, and awakened a spirit of resolution to carry out his prescriptions, which appealed to her judgment and common sense, and did not demand a blind faith in his remedies, as had heretofore been the case. The first step having been accomplished, she was now ready to receive the "movements." She was taught to push with her feet and hands each day against slight resistance, gradually increased, to which was added, after a little, slow stretchings of the muscles. This treatment was continued for about six weeks, during which time the light was gradually allowed to enter the room, and under its use both the general and special hyperæsthesia diminished in intensity, her appetite improved, her strength increased, and her moral tone was greatly elevated. The proper time had now arrived for taking another step in advance, and teaching her to walk again; but unfortunately she was seized with a severe attack of dysentery after the third trial with the braces (July 30, 1868), and an interval of two months elapsed before she had recovered sufficiently to resume the original pushings with the legs and arms. Six weeks were again consumed in recovering the lost ground. On the 16th of November the braces were put on, in the manner already described, and her walks were resumed, with very decided benefit, so that by the middle of February, 1869, she had so far improved in moral and physical strength that she was able to walk without any artificial support, and was brought to our institution to continue her treatment by apparatus which we employ to call forth the exercise of localized groups of muscles. Her improvement was henceforth uninterrupted, and in July she took her departure for the sea-shore, where she passed the summer with her family. She returned to us in January of the present year for further treatment, with the intention of insuring the good effects which had already been attained, preparatory to her marriage, which is soon to take place.

The following case, which is now under treatment, differs from the above in some particulars, but resembles it in the gradual evolution of the symptoms, the similarity of its origin, the complete prostration of the patient, and its steady improvement under the same plan of treatment:

Case VII.—The history which was given, when first seen by Dr. Taylor last fall, was to this effect. As a child, she had never been hardy. She grew up rapidly, and puberty was attained at an early age. At school she had been ambitious to keep up with her classes, but, not being gifted with quick apprehension, she had been obliged to confine herself closely to her studies. In time she acquired an unnatural fondness for sedentary pursuits, which, as she grew up to womanhood, she gratified by acquiring the art of landscape-painting, and spent many hours each day in perfecting herself in an accomplishment which was a source of great pleasure. But a prolonged confinement, unrelieved by the out-door exercises and diversions which are essential to health, bore hardly upon an organization which had never been vigorous, and while a young woman she came to be recognized in her circle of acquaintance as an invalid. About three years before, an aunt to whom she was closely attached was seized with an apoplectic attack, which terminated fatally in a few days, and during her illness the niece was constantly by her side, performing the offices of nurse, with her emotional faculties deeply excited. With the fatal termination of the case came a serious prostration of her powers, and from this moment dates the complete development of a decline which had pursued a nearly constant course up to the time in question. At intervals there had been remissions, more or less marked, in the manifestations of extreme functional disturbance, and about a year previous, after having passed a summer at the sea-shore, she had recovered much of her former degree of health and spirits; but an attempt to assume certain domestic duties, and an enthusiastic devotion to church matters, soon brought her into

the condition which was presented when Dr. Taylor first saw her. At this time she was able to be partially dressed every day and to sit up in bed; but she could not leave it, partly owing to physical weakness and partly to intermittent attacks of pain in the left leg, located irregularly in the hip, knee, or ankle. Her appetite was fair, but capricious, and her bowels were irregular. The uterus had never become disordered in any way, and, I may state, has remained in a healthy condition up to the present time. The disordered state of her nervous system was manifested by persistent headache, intense photophobia, morbid acuteness of the sense of hearing, backache, and symptoms of dyspepsia, but above all by an excitability under slight provocation, succeeded by excessive depression, which at times assumed the characteristics of paroxysmal hysteria, and had hitherto baffled every attempt which had been made to relieve it. As careful examination of each organ gave absolute proof that no organic disease existed, an opinion was expressed at the consultation that functional derangement of the nervous system had brought her into a condition which would certainly become intensified if it were not relieved by proper means. The principles upon which a rational treatment was to be conducted were explained to her physician in detail, and the case remained under his management. For a few weeks he practised her in pushing with the feet and hands against resistance, with stretchings of the muscles, and was able after a time to get her upon her feet. Unfortunately, his own health failed him when he had reached this point in advance, and he was obliged to relinquish the care of his patient to her mother, with explicit directions for her guidance. But his withdrawal was fatal to further progress; for in three days she had relapsed into the condition which she had presented before the treatment was commenced. Continuing to decline, in a short time her former symptoms were all much aggravated, including the hysterical element, and her muscular power was so far impaired that she was no longer able to sit up nor to use her limbs with any degree of freedom. We are here furnished with an instructive lesson in regard to the relation which should exist in these cases between the physician and his patient. By the exercise of his personal influence he must produce in her a feeling of dependence and reliance, so that she will insensibly yield to his will and judgment on all occasions and enable him to assume an absolute control over her very thoughts and purposes. Without the establishment of this psychological element, all other treatment is of secondary importance. Despairing of his ability to recover the lost ground, under the pressure of a large business, in his feeble state of body, her physician advised her removal to our institution, where she arrived on the 19th of April. She bore the journey of seventy-five miles without injury, though she suffered much at the time, and, after an interval of two weeks to enable her to recover from its effects, the treatment was resumed at the point where it had been interrupted. She is now walking about, and, under the usual system, bids fair to recover entirely.

(To be concluded.)

NOTES OF A CASE

OF LABOR COMPLICATED BY A FIBROUS CORD ACROSS THE OS UTERI.

BY H. Y. EVANS, M.D.

ON January 10, 1869, I was called in by Dr. N. Hatfield to see Mrs. D., æt. 36, Irish, weight 125 pounds, slight build. Third confinement; all previous labors had been tedious. Has been in labor forty-eight hours. Pains constant and good until eight hours since, when she was seized with very severe pains in stomach, followed by vomiting, both of which ceased after the use of carbolic acid. Has had opium and stimulants in abundance. At the time of my seeing her the pulse was 130—scarcely perceptible. Fearfully prostrated; cold sweats, dry tongue, etc. Pelvis small; head fast in superior strait, occiput to the left. Hodge's forceps were applied, and we spent two and a half hours in bringing down and delivering the head. The shoulders were retained for half an hour, but by rotating and using the hook with very great force the body was delivered. The uterus contracted on pressure and expelled the placenta, but the cord was held by something on which we could pull it backwards and forwards as over a pulley, which on examination proved to be a hard fibrous cord of the size of the usual wooden penholder; it was about two and a half inches long, and had firm lateral insertions in the os uteri. The child had been expelled on one side of it and the placenta on the other, and in this way retained the cord. The child was dead before the forceps were applied. It was of full term, and weighed about nine pounds. Not as much blood lost as usual in uncomplicated labors. We used spirits, carbonate of ammonia, etc., by stomach and bowel, but all in vain; the mother sank and died in six hours after delivery.

[Antero-posterior and lateral bands are not unfrequently found in the vagina, but not on the cervix, so far as we can ascertain, unless as a result of adhesions. They are supposed to be either irregularities in the situation and form of the hymen, or else the rudimentary septa of *vaginæ duplices*. Robert Lee relates a case of vaginal band high up (Clinical Midwifery, Case CCCLXVI.), in which there occurred very much the same difficulty in the delivery of the placenta as described above. J. Matthews Duncan (Researches in Obstetrics, New York, 1868, p. 450) gives a long list of references to cases of these hymeneal or vaginal bands. —ED.]

NOTES OF HOSPITAL PRACTICE.

UNIVERSITY OF PENNSYLVANIA.

CLINICAL SERVICE OF D. HAYES AGNEW, M.D.,

Prof. of Clinical and Operative Surgery.

WITHIN a very short period of time, three cases of rather an unusual form of malignant disease have come under my observation.

Case I.—The first, a Miss H., æt. about 47 years, noticed, four years previous to being under my care, an enlargement of the left mammary gland. The growth, during the first six or eight months, was rapid, and, from her description, the skin or subcutaneous tissue of the breast was œdematous, the nipple was but slightly retracted; there was no axillary involvement, and no pain of any consequence. The general health, as far as she could determine, was not materially affected. After the lapse of eight months the increase in the size of the gland ceased; its surface changed, becoming sun-browned in appearance, and with retraction of the connective tissue of the cutaneous glands to such a degree as to closely resemble the rind of orange or lemon. For a long time she had kept the matter carefully concealed; and it was only when she began to suffer considerable distress that this reluctance to disclose her situation was removed. On examination, I found the affected gland had almost entirely disappeared; the skin was brawny, strikingly in contrast with the contiguous parts; her face was sallow, and general emaciation had set in. The disease continued to extend, invading the surrounding skin. Its progress was marked first by change of color, becoming brown, then contracting and becoming hard as marble, devoid of all elasticity, and resembling very much the cicatricial tissue resulting from burns. The gland soon entirely disappeared, its integument becoming level with the surrounding parts, and nothing but the atrophied nipple remaining to mark its former site. This change of color and hardening of the skin extended up to the clavicle, downwards to the abdomen, and finally through the axilla to the arm, passing down almost to the elbow, and by its contraction pinioning the arm to the side. From the elbow down the parts became œdematous, and in a short time a cough set in, with marked dulness over the lower portion of the left lung, but no expectoration. Her weakness steadily increased, and in a little more than two years from the commencement of the disease death came to her relief.

Case II.—Mrs. G., æt. 48 years, discovered in the right breast, six months before consulting me, a hard swelling. Although

she was suffering no special uneasiness or pain, yet her mind had been greatly distressed from the moment her attention was drawn to the breast. On examination, I found a hard, somewhat irregular tumor imbedded in the substance of the gland, somewhat painful on being handled, the pain being radiating and lancinating. Two of the axillary glands were enlarged. Her complexion was a dirty yellow, and she had already lost some flesh. She was the mother of two children, the youngest about 12 years of age. Shortly after, the gland was removed by a surgeon. Three months after the operation the disease reappeared in the cicatrix, not, however, ulcerating, but extending as in the case above detailed, the skin becoming brown, then hardening and contracting, and slowly advanced, with remorseless fatality, over the breast towards the other gland, upward in the direction of the neck,—but not extending above the clavicle,—and outward to the arm. The surface over which the disease had passed resembled very strongly smoked bacon-skin. The hand and arm of the affected side became greatly swollen; the appetite failed, and that cachectic aspect so often impressed on the face by malignant disease was very noticeable. Her sufferings and debility were much increased by pain on defecation, dependent on thickening and stricture of the rectum, and very soon by change in the uterine walls. Her suffering became so great that nothing but full doses of anodynes gave her even a moment's relief, and in this state she sank and died, one year and five months from the commencement of her disease

Case III.—Mrs. ——, æt. 48 years, the mother of two children, enjoying unusual health, and rather inclined to be fleshy, discovered an enlargement of the right breast in the fall of 1869. It was not attended with any severe pain, although occasionally some darting sensations were experienced. In her case there was no sign of any distinct tumor; it was a general and uniform enlargement. Becoming uneasy, she consulted her physician, who at once advised her to see some surgeon, which was done within a few weeks. A short time after, I was desired to confer with her surgeon in reference to its nature and the best course to be adopted. At the time of our consultation the mammary gland was of very large size, firm but elastic; a little change had taken place in the nipple; the axillary glands were sensitive, but not enlarged; the skin was brawny and slightly œdematous over the surface of the gland, but there was no evidence of her system suffering from the disease. Our decision was adverse to any operation, believing its progress would be rapid. She was ordered a preparation of iron and arsenic, and a good diet, with out-door exercise. Three months after, the gland suddenly ceased to enlarge, and commenced to diminish until it had almost entirely wasted away. In four months more the left breast began to enlarge, becoming as voluminous as the right before its atrophy, and then, like it, undergoing this peculiar retrograde change. When the glands had subsided to a level with the general surface and become extremely hard in consistence, dusky in color, and marked with many depressed points, the disease commenced its march towards the neck, abdomen, and axillæ, passing through the same stages of color, induration, and contraction, and attended with severe itching. From the axilla it invaded the arm, contaminating the glands of those regions, and producing, by pressure on the vessels, great swelling of the arm and hands. So great did this contraction become as to incurvate the chest and approximate the shoulders anteriorly, preventing the recumbent position altogether, and interfering so much with the expansibility of the thorax as to produce great difficulty of breathing. The emaciation increased rapidly; the appetite failed, and over the posterior part of the right side of the chest marked dulness existed on percussion, coincident with which there was some cough. In one year from the commencement of the attack the fatal result occurred.

Such, gentlemen, is a brief résumé of three singularly interesting cases of malignant disease, which serve to foreshadow the probable progress and result of the case which is now before you.

Case IV.—This lady is 49 years old, married, and, with the exception of an attack of intermittent and an occasional sick headache, has enjoyed a reasonable degree of health. Four years ago she noticed a slight swelling of the left breast, with shooting pains, excessive itching, and some depression of the nipple. After a year and a half the gland began to diminish, the surface became covered with depressed points, and the color became dark; and now the other gland is assuming the same appearance.

These cases most nearly resemble that form of cancer which is termed lardaceous. The cells rapidly infiltrate the surrounding cellular tissues, and also extend among the fasciculi of the muscles. No operation is allowable: it promises nothing; and the judicious surgeon will save his reputation by carefully abstaining from the use of the knife. It will be observed that the age of the four cases presented is nearly the same, and that in three of the four there was at least rational evidence of the disease seizing upon internal organs. The result of the case, I have little doubt, will exhibit a similar tendency to the wide dissemination of its destructive cells.

HOSPITAL FOR DEFORMITIES AND DISEASES OF THE NERVOUS SYSTEM.

SERVICE OF DR. S. WEIR MITCHELL.

Reported by Dr. Wharton Sinkler, Assistant Physician.

NEURALGIA OF ARM, WITH PARALYSIS AND ATROPHY OF SHOULDER-MUSCLES, RELIEVED BY FARADISATION AND COUNTER-IRRITATION.

S. S., female, æt. 17 years. Has been employed as a weaver for one year, up to three months ago. General appearance that of excellent health. Four years ago, without any assignable cause, she had necrosis of the right elbow. She was treated at the Pennsylvania Hospital, and a portion of the lower end of the humerus was removed. There exists complete anchylosis of the joint; but it did not interfere with her working, and in weaving the greater part of the work is done with this arm. About four months ago she had an attack of tonsillitis, and one tonsil was excised. With these exceptions, she states that her health has been always perfect and all her functions have been performed regularly. About February, 1870, she first experienced pain in the right shoulder; it was not constant, but came on in the evening, after she had worked all day at the loom, and gradually wore off. The pain extended over the outer surface of the arm, from the shoulder to the elbow. At this time she found that the right arm began to get weaker than the other; she was unable to lift it to her head in dressing her hair, and thinks that it hung lower than the other. Neither she nor her mother observed any change in the appearance of the arm, and she continued working as usual. The pain and loss of power gradually increased, the arm becoming painful while she was at work, but the pain ceasing as soon as the work was stopped.

About three months ago she was compelled to stop work, both on account of the severity of the pain and the loss of power in the limb. She was unable to raise the arm from her side, and it hung like a dead weight; at the same time, any movement caused so great pain that she was obliged to hold the arm steady with the other hand. About one month previous to this, the arm began to get smaller and the shoulder flattened.

On September 23, when she applied for treatment in this institution, there appeared to be complete paralysis of the right arm. She was unable to raise it or swing it backwards and forwards; any attempt that was made to move the arm caused intense pain. The deltoid and scapular muscles were greatly atrophied, as well as the muscles of the arm and the pectoralis major. There was tenderness on pressure over the affected muscles and nerves and the bony prominences about the shoulder; but she stated that there was no pain while the arm was at rest. Electro-muscular contractility was entirely wanting in the above-named muscles. Electro-sensibility unusually acute. All the movements of the hand were perfect, with the exception of pronation and supination, which had been wanting since the anchylosis of the elbow; she used the hand in sewing readily; has never had backache or headache.

An application of ol. tiglii and veratrine was ordered to the shoulder and whole arm-surface, and faradisation twice a week.

The irritation caused by the ointment was excessive; but under it the pain disappeared.

December 13. The shoulder is still flattened, and the acromion prominent to a certain extent; but great improvement has taken place in the appearance of the shoulder; it is larger and rounder; all of the affected muscles have increased in size to a considerable extent. She is able to swing the arm backwards and forwards freely and to raise it about twelve inches from the side without the least pain. There is no pain about the shoulder or arm, except when extreme elevation is attempted. There appears to be a contraction of the muscles about the shoulder-joint which interferes with the arm being raised more than a foot from the side.

Electro-muscular contractility is still wanting. The sensibility to the current is rather greater than usual, but not so excessive as at first.

Temperature of left axilla, ...	100°
" " right "	100°
" " left bend of elbow, . .	96°
" " right " " " . . .	92°

The nerves affected in this case were the supra-scapular, external anterior thoracic, and circumflex. The origin of the disease was difficult to trace, as there did not seem to be any affection of the shoulder-joint, such as sometimes precedes, in scrofulous or rheumatic cases, disease of the shoulder nerves, usually beginning in the circumflex nerve, owing to its relations to the joint. The sudden relief of the intense neuralgic pain was due to the very extensive surface irritated. Pearson, who wrote early in this century, has reported several cases relieved by such means after all others had failed.

DISLOCATION OF ELBOW; REDUCTION IN FOUR WEEKS, FOLLOWED BY PARTIAL PARALYSIS OF THE HAND; RELIEF BY FARADISATION.

LIZZIE W., æt. 18 years. In the end of March, 1870, she fell down-stairs and dislocated both bones of the left forearm backwards, without fracture. The dislocation was reduced by Dr. T. G. Morton at the end of four weeks. There was no loss of power or of feeling in the arm before the dislocation was reduced. She had been sewing without difficulty. About one week after the reduction of the luxation she began to discover loss of power and of sensation in the hand. On November 1, when she came under Dr. Mitchell's care, the case was not improving, and there was complete paralysis of the third and fourth fingers, and feebleness in the others, without much loss of power in the thumb. She was unable to separate the fingers or to extend the last two phalanges when the first phalanges were held firmly in extension. She could only half shut the hand, owing to the great loss of power in the flexor communis digitorum.

Nutrition.—Atrophy existed in the line of the flex. com. dig., but none in the extensors in the forearm. Extreme atrophy in the abductor min. dig. and in the first interosseus muscle. The other interossei muscles were also considerably wasted. Entire loss of sensation was found in the distribution of the ulnar nerve. Sensation was perfect in the radial and median distribution. She states that when she cut the nails of the third and little finger it gave rise to a painful and disagreeable sensation, despite the loss of tact.

Electrical Condition.—There was no electro-muscular contractility in the interossei, and it was lessened one-half in the flex. com. dig. The electro-sensibility was unimpaired.

Treatment.—The forearm and hand were ordered to be faradised twice a week, and particular attention to be paid to the interossei.

December 13. There is great gain in the sensibility of the hand. The size of the abductor min. dig. has increased extremely, and also that of the interossei and flexor muscles. The improvement in the first interosseus is not so marked. The power of movement is greatly improved. She can now shut the hand completely, and the grip is strong, although the electrical condition has improved but slightly, except in the flex. com. dig.

Temperature in the little finger of right hand, . .	90°
" " " " " " left hand, . .	84°
" " " palm of right hand, ...	94°
" " " " " left hand, ...	92°

This case is interesting because it illustrates the fact that nerval lesions, after dislocation, are apt to be due to the reduction rather than to the displacement, and that the longer the delay in reducing them, the greater is the risk of nerve-injury. In some cases the injury is immediate; in this one it was not noticed until a week after reduction, perhaps because the arm was kept at rest. The improvement in motor power and in sensibility is so considerable that Dr. Mitchell regards the continued low temperature of the right ulnar region as remarkable.

PENNSYLVANIA HOSPITAL.

A CASE OF SEPARATION OF THE SIXTH AND SEVENTH CERVICAL VERTEBRÆ WITHOUT LATERAL DISPLACEMENT.

Reported by Dr. H. C. Wood, Jr.

P. M., a large and very athletic Irishman, came into the surgical wards of the Pennsylvania Hospital on the afternoon of December 26, 1863 (during my residency), with the following history: An hour or so before, he had been riding upon a barrel in the hinder end of a cart. By a sudden jerk he was thrown out backwards, alighting upon the back of his head and neck. At the time of his entrance his condition was as follows. His intellect was not in the least affected. His head was held in a nearly natural position, but was kept very still, and almost rigidly so. He complained greatly of a fixed pain at the junction of the neck and shoulders. His arms were partially paralyzed, and he was unable to clinch his fists. There was total abolition of voluntary motion and of sensation in his lower extremities. He had violent priapism, without, so far as could be discovered, any seminal emissions. His breathing was rather rapid and labored. Moving his neck greatly exaggerated the spinal pain. From the time of his entrance until his death he never passed any feces, and his urine had to be drawn off by a catheter. There was no marked lesion at the back of the neck, only an apparent want of prominence of the spinous processes. On the morning of the next day, the 27th, he was much the same, save that sensation had in some degree returned to his limbs. The muscles of the extremities were constantly affected with slight twitchings or undulatory spasms of their fasciculi. Titillation of the surface increased these, but did not produce full muscular contractions. His priapism continued, and there was marked tympanites of the bowel. In the evening his breathing was more laborious, and his abdominal distention still more distressing; yet his priapism had disappeared to a great extent, not to return. On the morning of the 28th all his symptoms were exaggerated. He now sank very rapidly, frequently regurgitating quantities of a watery fluid, and died about two o'clock P.M., about forty-eight hours after the accident. His intellect was perfectly clear to the last.

The autopsy revealed a dislocation upwards of the sixth from the seventh cervical vertebra, with fracture of the spinous process of the former. The separation was greater on the left than on the right side, and posteriorly than anteriorly. It was as follows: Measuring behind, at the articular processes, on the left side four and a half lines, on the right side three lines. In front, measuring from the centre, it was two lines. The line of the vertebræ was almost perfectly preserved; for the sixth vertebra did not vary more than a quarter of a line, laterally or antero-posteriorly, from its normal position.

REMARKABLE VITALITY (NEGAR: *Denkschrift zur Eröffnung der Gynäkologischen Klinik*).—Negar details the history of a peasant-woman, 42 years old, who was successfully delivered, at the end of the ninth month, of her sixth child. The placenta was retained, and the accoucheur attempted to remove it, with only partial success; but during the manipulation a loop of intestines protruded into the vagina and was replaced by the physician. The partially-retained placenta was spontaneously expelled in a few days, when the descent of a still larger loop of intestines compelled a second reposition. Complete recovery took place after several weeks.

THE MEDICAL TIMES.
A SEMI-MONTHLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

PUBLISHED ON THE 1ST AND 15TH OF EACH MONTH BY
J. B. LIPPINCOTT & CO.,
715 and 717 Market St., Philadelphia, and 449 Broome St., New York.

MONDAY, JANUARY 2, 1871.

EDITORIAL.

THE ANNUAL REPORT

OF THE SURGEON-GENERAL, AND THE MEDICAL AND SURGICAL HISTORY OF THE WAR.

THE Annual Report of the Surgeon-General for the fiscal year ending June 30, 1870, has been received, and, as usual, is found to contain much interesting information,—more briefly stated, perhaps, than would be desirable to the profession at large, but not more so than is probably necessary for its purpose. Brief as it is, we must content ourselves with referring to but a few of the main topics presented in it.

The Statistics of Sickness and Mortality show a gratifying improvement in the health of the army during the year. The following table gives the principal facts:

	Mean Strength.	Taken Sick—Disease.	Taken Sick—Wounds and Injuries.	Average constantly on Sick Report for Disease.	Average constantly on Sick Report for Wounds and Injuries.	Deaths from Disease.	Deaths from Wounds and Injuries.	Discharged on Surgeon's Certificate of Disability.
White Troops, Nos.	29,022	53,836	8744	1156	263	249	125	745
White Troops, Ratios per 1000 . .	.....	1,855	301	40	9	8	4	26
Colored Troops, Nos.	3,407	5,479	729	146	32	51	15	104
Colored Troops, Ratios per 1000 . .	.....	1,608	214	43	9	15	4	31

We are glad to learn that "the printing of the Medical Volume of the first part of the Medical and Surgical History of the War" is near completion.

"This volume embraces the statistical tables representing the sickness, mortality, and discharges from service on Surgeon's Certificate of Disability, of *white* and *colored troops* during the war, and will be a work of nearly seven hundred and fifty (750) pages quarto. To secure accuracy, the tables were stereotyped as they were finished, and before finally sending them to press they have been thoroughly revised throughout, and every effort made to attain accuracy. With this volume will be bound the appendix to the first part of the Medical and Surgical History of the War, containing the Reports of Medical Directors and other appended documents,—about four hundred (400) pages.

"The whole of the manuscript for the Surgical Volume of the first part of the Medical and Surgical History of the War, authorized by the act of Congress approved March 3, 1869, is now prepared, and several of the more important subjects that would belong to the second volume, as, for example, the tabular statements, discussions, histories of typical cases (with illustrative wood-cuts and lithographs) of twenty-nine thousand five hundred and seventy-two (29,572) cases of amputations, and four thousand seven hundred and seventy-five (4775) excisions, are nearly perfected. Besides this, the surgical statistics of the army for the five years succeeding the war have been consolidated and arranged for publication, and much information has been furnished to authenticate just claims of applicants, and to defeat those that were fraudulent, under the act of Congress authorizing the issue of artificial limbs to mutilated soldiers and seamen. The effect of this law, in bringing to Washington a large number of pensioners to present their claims, has permitted the study of the remote effects of injuries and mutilations. The peculiar value which the surgical data of the late war have acquired in consequence of the measures taken to trace the ulterior results of the more important cases cannot be overestimated. In the reports of the surgery of European wars, and of campaigns in India, Abyssinia, and elsewhere, the history of cases terminates when the men were invalided or discharged. Although the elaborate reports of the casualties of the French armies in the Crimean and Italian wars were published in 1865 and 1869, after an interval of ten years from the conclusion of hostilities in each case, no information is given subsequent to the date of discharge or pension.

"The abstracts of cases in this office are invariably traced to the date of publication."

The continued increase in interest and value of the Army Medical Museum, referred to in the report, is very satisfactory, and, in view of the fact that to support it and continue its usefulness a small annual appropriation is necessary, it is eminently proper that the attention of Congress should be directly called to the estimation in which it is held by scientific and professional men. The immense amount of material of great interest and value which it contains should be made available by publication of descriptions and reports with as little delay as is consistent with their proper preparation; and there ought to be no hesitation or delay in granting the authority and means necessary for this purpose.

For example, it is stated in the report that

"The collections now include eight hundred and ninety-seven (897) human crania, and thirty-four (34) skeletons. Elaborate tables have been prepared, exhibiting their measurements. The diameters, facial angle, internal capacity, and position of the *foramen magnum* are indicated for each cranium. It is hoped that the publication of this important contribution to anthropological knowledge will be authorized by Congress. The tables, arranged to correspond with those published in the *Crania Americana* of Samuel George Morton, would worthily supplement that great work. The museum possesses a larger number of skulls from tumuli, and of crania of North American Indians, than are elsewhere collected; and it would appear due to ethnologists throughout the world that descriptions of the specimens should be published, as was done by the Russian government for the collection of Professor von Baër at St. Petersburg."

The publication of the tables and descriptions referred to is very desirable, and the authority requested should be granted at once.

The reports already published in the form of the well-known circulars from the Surgeon-General's office have been most highly appreciated in all quarters, as appears from a brief memorandum of extracts from letters and reviews relating to them, which accompanies the report, having been drawn up for the information of Congress as being the best argument in favor of their continuance. The very great liberality with which these publications have been distributed in

this country is no doubt the main reason why they seem to be less appreciated here than in Europe, for the value of a thing in our eyes is often in proportion to the difficulty of obtaining it. Already the experience gained by the medical department in this country has been made available in Europe. We read of hospital steamers and hospital railway-cars as being used by the Prussians; the American Pavilion Hospital has received universal commendation, and been generally adopted as a model; and the system of organization of our army medical corps has been followed by more than one nation in the Old World.

The speedy publication of the data prepared for the Medical and Surgical History of the War depends now upon Congress; and we trust that it will not adjourn without providing for it. No nation has ever possessed in its archives such abundant material for a complete medical history of a great war as has been accumulated by the indefatigable zeal and admirable system of the army medical corps during our late protracted civil war. We feel, therefore, that it is of the utmost importance that ample appropriations should be made to insure the speedy preparation and publication of this great and truly national work, which will be not only a monument to the genius, skill, and energy of American army surgeons, but a collection of facts of incalculable value to the medical profession throughout the world.

We have only space to note one other point in the report; but that is an important one.

There are now 48 vacancies in the medical corps, and, as the law stands, these cannot be filled.

On the 30th of June, 1870, there were 147 commissioned medical officers available for duty with troops, 4 on leave of absence, and 4 on sick-leave. There were 217 military posts, besides numerous detachments, each requiring a medical officer. The deficiency was, of course, supplied by hiring contract surgeons, which is neither economical nor satisfactory.

It certainly cannot be the intention of Congress to cripple and damage the medical corps of the army; but that must be the result under the present system. We hope that the recommendation of the Surgeon-General and of the Secretary of War in regard to this matter will have the desired effect, and that the law forbidding promotions and appointments in the medical staff will be repealed during the present session.

THE UNITED STATES PHARMACOPŒIA.

No. II.

IN reading the history of our national standard, there is one peculiarity visible in every line, that must strike any one familiar with the world's Pharmacopœias. All others are governmental in their origin, hemmed in and enforced by decrees of parliament or of king, whilst our standard is essentially voluntary in its source and authority,—dependent for the one on the unpaid labor of a few medical gentlemen; for the other, on the good sense and submissiveness of the profession at large.

It is a subject for serious consideration,—a subject growing in gravity as the area and power of our civilization grow,—how far the national code is in reality accepted, and how it shall be possible to bind together Boston and New Orleans, Philadelphia and San Francisco, by one common recognized standard. It is *a priori* very probable that the machinery sufficient to hold together the American profession when it was huddled upon the eastern slopes of the Alleghanies will not be powerful enough to control widely separated sectional habits and interests. It is a significant fact that at the meeting of the convention of revision, last spring, there was not a single delegate present from farther south than Richmond, and none from any place in the vast territory west of the Alleghanies, save only some pharmaceutists from Chicago. The acceptance of the Pharmacopœia never has been sufficient to insure safety to our travelling patients. Thus, even to the present time, many of the New York druggists habitually put up Magendie's solution for Liquor Morphiæ Sulphatis. We have known a number of nearly fatal mishaps from this, and have no doubt that death has actually been caused by it. More than this, it is notorious that disregard of the U. S. Pharmacopœia is increasing rather than decreasing, so that, in truth, very many of the processes of the last edition have been everywhere abandoned, and the rapid strides of pharmacy and practical medicine have brought into universal use numerous preparations and remedies which are not officinal. The fluid extract processes of the last edition were mostly excellent, but they were founded upon cheap alcohol. The sudden war, and consequent mildew of enormous taxation, occurring directly after the book was published, so advanced the price of the menstruum as to make the processes ruinously expensive, and all druggists were forced into the adoption of plans cheaper than the officinal. On the principle of one step leading to another, no doubt this, under the pressure of competition, has been followed in many instances by a general looking for cheaper processes. The last convention wisely provided for such emergencies by decreeing that the committee of final revision should be a perpetual one, and have power, after the issue of the revised Pharmacopœia of 1870, to alter its processes and adopt new preparations or remedies by announcing the same in the journals. There will be, therefore, no excuse in the future for the officinal standard falling so lamentably behind the times.

Unfortunately, however, no resolutions can touch such cases as the action mentioned of New York druggists, who, to us, seem to be morally guilty of manslaughter in their recklessness. It would, very possibly, be a point of some nicety to decide how far their legal accountabilities would extend in case of a death occurring and the matter being brought into court. The good of the country, we think, requires, however, that this should be no nice point,—that the law should say plainly and emphatically that a druggist causing

death by putting up a non-officinal for an officinal preparation was guilty of manslaughter. The day is rapidly approaching when, as in England, wealthy patients will be continually going to the medical centres for opinions; and shall it be that the harmless officinal prescription written in Philadelphia shall become transformed into an instrument of death by a journey across New Jersey of less than a hundred miles of rail? We think the time has nearly, if not fully, come when Congress should be asked to give legal authority to our national standard. Such law need not encroach or in any way interfere with the commercial rights of any; in no way should it influence the manufacture or sale of patent medicines, elixirs, or other special preparations. It would be sufficient, we think, for it to consist of two parts: the one giving legal sanction to the revisory convention and its committees as at present appointed and governed; the other requiring of pharmaceutists that when any preparation be called for under the officinal name, it should be prepared in accordance with the officinal standard. Thus, the druggists should be allowed to put up *only* the officinal solution when Liquor Morphiæ Sulphatis is called for, and the physician who wants Magendie's solution should be forced to write for it by another name. There is such reasonableness in this that we think Congress would readily pass a moderate law, were it memorialized by the various medical societies and colleges throughout the land.

To call attention to this matter,—to excite, if possible, discussion in the medical journals, so that at last action may be taken by some body or bodies,—is the object of the present editorial. If it fail in doing so, it will be but bread cast upon the waters; and, although neither a prophet nor the son of a prophet, we fear lest the day may come when, by very confusion and vexation, the profession will be forced to look into the subject seriously, and to attempt a reformation, now easy, but which then will be a veritable cleansing of Augean stables.

NECROLOGY OF THE PAST YEAR.

THE year 1870, though dead, will long live memorable for the loss of distinguished representative medical men. In its literary walks and its fields of professional culture the medical world will hereafter date from the few months past the deaths of illustrious physicians and surgeons who in their lives graced and adorned them. It is a striking evidence of the fraternal spirit that exists among professional men the world over, that when death invaded this brilliant circle of intellect, genius, and skill, the loss was almost as keenly felt on this side of the Atlantic as it was in the countries honored in their valuable lives. But few of these deaths occurred outside of Great Britain, and, oddly enough, almost all of them during three months of the early summer.

Of the eminent men thus lost to science and the world, SIR JAMES YOUNG SIMPSON, who died on the 6th of May at Edinburgh, was the representative of a class of writers, practitioners, and discoverers—alas! too few—who, as was truly said of him, unite to accurate perception and the faculties of induction and almost intuitive generalization a spirit of fearless self-sacrifice, a never-satisfied curiosity, and an indomitable love of work. His practice was immense, and for thirty years taxed his energies almost to the point of extreme endurance, yet he found time to enrich medical literature with numerous original contributions and additions. He was distinguished as a lecturer and an antiquarian, and was endowed with the personal gifts and attributes of greatness. He will always be gratefully remembered as the fearless introducer and advocate of the use of chloroform in obstetrical practice. For this was he honored while living, and the good he has done will not be all "interred with his bones."

THOMAS NUNNELEY, who died early in June, was one of England's best provincial surgical practitioners and observers. He practised his profession in Leeds, but his physiological and surgical contributions to literature were familiar to cisatlantic readers as the emanations of a man of observation and experience.

AUZIAS-TURENNE, who died in Paris on the 29th of May, was a striking illustration of the fact that a man may devote almost a lifetime to the pursuit of one idea, involving numerous original inquiries and investigations, and yet die and leave the world to regret that so much intellect, energy, skill, and perseverance had not been given to objects of really practical importance. He was celebrated as the originator and advocate of syphilization and of the theory of the communicability of syphilis to animals.

SIR JAMES CLARK, who died June 29, was well known in more than one walk of the profession. His work on Climate was a sound, clear, and carefully-written treatise. As a practitioner he won general confidence, and for a third of a century preserved the friendship of his sovereign, who honored herself in selecting as her professional adviser a man so distinguished for his judgment, moderation, and integrity. A writer in an English, medical serial has remarked that "when the modest grave at Kensal Green received the remains of James Clark on July 4, it closed over one of the best men who ever lived."

The death of Edinburgh's illustrious surgeon, JAMES SYME, took place on the same day. He too, like Simpson, his fellow-townsman, had for a long series of years overtaxed the energies of a vigorous intellect. He was the author of systematic works on surgery and of numerous valuable surgical monographs, was for nearly forty years Professor of Clinical Surgery, and will long be remembered as an expert and skilful operator who stood in the very first rank of his profession. Many important operations are said to have been performed by him for the first time in Great Britain; among others, those for excision of the upper jaw, disarticulation of the clavicle from the sternum for the removal of a tumor, subcutaneous section of the sterno-mastoid for torticollis, etc.

DR. JAMES COPLAND, the author of the great "Dictionary of Practical Medicine," died July 12. His fame

will rest on his literary labors, which were very extensive, and included contributions to journals and to general literature on almost every branch of medical science. He received altogether from twenty-five to thirty thousand dollars for his dictionary, the publication of which was the work of nearly thirty years. The writer of this article well remembers, in a social visit paid in 1857 to this distinguished author and genial, hospitable conversationalist, the bantering manner in which his friends dated future events from the time when the dictionary was to be finished,—for it had already lingered along for more than a quarter of a century and was still uncompleted,—and the doctor's appreciation of the honor done him by the American publication and diffusion of this monument of his erudition, mingled with a not inconsiderable amount of sensitiveness at the piracy from which he was then deriving no pecuniary recompense. It is to be regretted that he did not live to give to the world the autobiography on the preparation of which he had entered not long before his death.

Prominent in a special branch of professional investigation and practice was ALBRECHT VON GRAEFE, of Berlin, who died July 20, at the early age of forty-four. Ophthalmic surgery then lost its chief ornament and exponent; for he was a bold, skilful master-operator, with abundant knowledge, self-reliance, and self-confidence, who, while crowning with success his own labors, was ever ready to devise improved methods to assist others, in all future times, in their delicate surgical interference with the eye. He is best known for his originality in suggesting and his skill in employing iridectomy for the relief of that very intractable affection, glaucoma. He literally succeeded in opening the eyes of the blind; and for this, if for nothing else, his name will descend to posterity blessed with the enthusiastic admiration and affectionate remembrance of mankind. In face he is said to have so strongly resembled the traditional likenesses of our Saviour, that he was rather irreverently called Christus by the German students.

Several other deaths occurred abroad during the year among those who had devoted their talents and their lives to the pursuit of medical knowledge. We may briefly mention among these the names of JOHN ZACHARIAH LAWRENCE, celebrated as a writer on ophthalmology, who died July 18, and EDWIN LEE, the author of a valuable work, often quoted, upon the baths and watering-places of Europe, who died in June.

We do not dismiss the consideration of the losses sustained at home by the American medical public with a brief mention, from any want of appreciation of the services rendered to literature and science by those who died here during the year; but we feel that, though the reputation of some of these was national, their local status in the great districts of country in which they taught, wrote, and practised almost overshadowed it. The great West is especially identified with the professional history of DR. BENJAMIN W. DUDLEY, who died last January, at the age of fourscore, after a life devoted to surgical teaching and surgical practice, lithotomy being one of the important operations in the successful performance of which he won great distinction. DR. CHARLES A. POPE, whose life so abruptly terminated in Paris last July, was another Western teacher and practitioner of the first standing in his profession, and for years was recognized as one of the ablest surgeons in that section of country. DR. LEONARD MARSH, who died August 16, had been for fifteen years a professor in the University of Vermont, and was therefore more directly connected with the progress of medical science in the far East. DR. GEORGE C. M. ROBERTS, Emeritus Professor of Obstetrics, etc. in the Washington University, Baltimore, who died in January last, was in like manner identified with the interests of medical teaching and practice in an entirely different section. We do not intend to draw the inference that medical science or the reputation founded on its active pursuit can or ought to be purely sectional, but that to gain a fame that will pervade every region of this vast country and thence be borne to distant lands requires a large share of the qualities of mind and the culture that have made the names of Simpson, Copland, and others familiar to every professional man in this country. DR. GUNNING S. BEDFORD, who died on the 5th of September, was, as is well known, a teacher of medicine for over a third of a century, one of the founders of the University of New York, author of valuable works on obstetrics and the diseases of women and children, and a successful practitioner in that specialty. There are, doubtless, many others of less prominence in the profession who have died during 1870, here and abroad. It is but justice to some of them to say that in their more limited circles of usefulness they probably had the opportunity of accomplishing even more good to their fellow-beings than some of those of greater distinction.

We stand on the threshold of another year, like pilgrims starting on an unknown journey, who turn but for a moment to gather, from the examples of those who have preceded them, useful lessons for their own guidance.

CORRESPONDENCE.

DERMATOLOGY ABROAD.

LETTERS FROM L. A. DUHRING, M.D., OF PHILADELPHIA.

No. III.

LONDON, July 10, 1870.

ENGLAND, the home of Willan and Bateman, and, since their day, of many other earnest and hard workers in the field of dermatology, must ever hold an important position in this sphere. The interest that once inspired such minds still exists, and that it may take even deeper root must be the wish of every man interested in the advancement of science. The English dermatology of 1870 is a fixed school of its own, with but little of the foreign element, and as such deserves careful study. In addition to a few data relative to the institutions for diseases of the skin in Vienna and Paris, I shall now give a summary of the principal hospitals and dispen-

saries in this city. Almost all of this practice here is conducted through dispensaries, such an institution as a hospital devoted to these affections being unknown. At the corner of Blackfriars Bridge stands the building called "Hospital for Skin Diseases," founded about thirty years ago through the liberality and exertions of Mr. Startin, a gentleman whose name has long been associated with this branch of medicine. This institution is in the hands of able managers and well-known physicians, but, for want of funds, amounts only to a large dispensary where patients come daily to receive advice and medicine. There are but six or eight beds in the hospital, and these generally vacant, though the dispensary practice connected with the establishment is a large one, the average attendance of patients being from one hundred to one hundred and fifty daily. The medical staff is represented by Messrs. Hutchinson, Sims, and Nayler, each having certain days of the week when they hold their examinations. As a rule, two hours of an afternoon are given by these gentlemen to the dispensary service, and in this limited period one hundred cases are seen and cared for,—some of them new, others old. Generally the patients return in eight days, though occasionally, when the case happens to be a grave one, they are told to come back in three days. Upon the whole, there is but slight endeavor made to study the disorder,—in many cases the examination resolving itself into an inspection for the purpose merely of making the diagnosis; this done, the case is hurriedly disposed of, to make room for the next. The attendance being so large, it becomes an impossibility for the limited number of physicians to give the time and attention that cases often deserve. At this hospital there is no instruction whatever given, nor is this vast material at all made use of by the students. In connection with University College Hospital there is a department for diseases of the skin, under the charge of Dr. Tilbury Fox, whose valuable contributions to dermatology are so well known. Here from fifty to seventy-five patients are seen three times a week, and treated as dispensary cases. Unfortunately, in this well-managed hospital only two beds are appropriated to the department for diseases of the skin. At the dispensary, Dr. Fox meets his class of students upon certain days and gives them a clinical lecture on cases as they chance to present themselves, adhering to the doctrines set forth by himself and the English school generally. Connected with Guy's Hospital there is a like dispensary department, conducted by Dr. C. Hilton Fagge; and St. Bartholomew's, Charing Cross, and the London all possess similar chairs. "The British Hospital for Skin Diseases" is also a dispensary, under the care of Mr. Squire. This institution, too, like the "Hospital for Skin Diseases," must content itself with the dispensary service until sufficient funds be raised. These that I have just referred to, I believe, are the principal corporations of the kind in London, all being maintained by voluntary contributions; and, indeed, the same may be said of all the charitable institutions and hospitals of London, excepting those that are endowed. Thus it is that the workers in dermatology are cramped in their endeavors to progress and elevate the study to its proper position. Material enough, but unfortunately no hospital where disease can be treated and studied. From the foregoing remarks it will be seen that the treatment of this class of diseases throughout London is mainly dispensary, and it is upon such practice that the English school founds its therapeutics. It will scarcely be questioned that having cases under care in a hospital is a more speedy method of curing disease; but neither must the good done by a judicious dispensary treatment be underrated. London, not having a hospital devoted to this purpose, accepts the next best measure, and throws her strength into dispensaries. Again, to draw a comparison, the lack of regular courses of lectures and of clinical opportunities makes it inferior as a school to Vienna or Paris, although, as said of Paris, to one grounded in the rudiments of the subject, the various dispensaries offer some rare and interesting material. Professor Erasmus Wilson, whose name has so long been associated with dermatology, and whose works are so universally known, holds the chair of Dermatology in the Royal College of Surgeons, and there delivers a course of lectures through the spring season; but these, I imagine, are intended more for the ears of the initiated than the student. In referring to the College of Surgeons, I cannot omit the beautiful collection of models of skin diseases, made by M. Baretta, of Paris, and recently presented to the College by Prof. Wilson. They are lifelike, and portray the diseases in a most striking and accurate manner. Many of the models are duplicates of those in the St. Louis Museum, and are furnished with full notes and remarks. In consequence of the scattered condition in which dermatology is found in London, it is most difficult to form a correct idea of this department. The institutions are situated at such enormous distances from each other that it becomes an impossibility to visit more than one dispensary a day, and then, as most of them only have certain days weekly on which such cases are seen, much time is necessarily lost. Yet, by giving two or three months of daily attendance at one or two of the hospitals, a fair estimate of English dermatology may be obtained. Curious as it may appear, there exists to-day in England a strange ignorance of the leading features of the French and German schools; and especially is this true regarding the treatment. England, like France, holds herself aloof from Germany, and seems to say, Pray, how can there be anything better than this method that we have employed for the last half-century? Eminently conservative, she looks upon innovations suspiciously, and is thus debarred from the improvements made from time to time in Germany. The contrast is very striking to one coming direct from the centre of dermatology. Diseases of the skin are not studied in that thorough routine manner so noticeable in Germany; nor is due credit given the Germans for what they have accomplished in the last twenty years. The doctrines of dermatology as set forth by English writers of the present day are not based upon recent investigations, but on those advocated years ago, and many of them abandoned by other nations. In England, as in France, great attention is paid to the internal treatment of this class of affections, amounting, in many cases, to a total disregard of the external symptoms; and this, I think, may be set down as one of the characteristics of the English school. Now, according to the views of many, there can be too much attention to internal treatment, and not enough to external. Provided the pathology of the disease in question be understood, and means are possessed that will operate with some degree of certainty against the trouble, internal treatment is of great value; but where the pathology is involved in obscurity, and where a drug is given with no positive knowledge of its mode of action, used empirically, there is danger of falling into error.

If I can judge from personal observation in England, too little regard is given to the external treatment of disease,—

patients often being dosed with medicines for months, where with an external treatment the difficulty would yield kindly in a much shorter time. In the present state of our knowledge, the pathology of many diseases of the skin is too obscure to admit of an internal treatment with a view to a positive result; and until the cause is more fully understood internal treatment can never assume its proper position. But, to return to facts, let me state that there are certain diseases which occur much more frequently in England than elsewhere, and of these psoriasis is an example. Hebra noticed long since that psoriasis, as a rule, occurs in persons of a strong build and good nutrition,—those who would be called in excellent health and condition, with no trouble except the eruption. Now, whether it is that England contains more psoriatic cases because the physique of the English race is fine, or whether its prevalence is due to other causes, is a question worth noticing. According to the report of Mr. Erasmus Wilson, in his "Statistics of Cutaneous Disease among the Wealthier Classes," lepra or psoriasis occurred 628 times among 10,000 cases, or one in sixteen; whereas in Vienna, at the General Hospital, the proportion is one in sixty. It has long been a question open to discussion whether diet has any effect upon psoriasis. Cases are on record where cures are said to have resulted from the use of meat-diet, while in others milk-diet is said to have proved beneficial, and again in others no diet has proved of avail in ameliorating the disease. Nevertheless, the fact that psoriasis occurs so much more frequently in England than elsewhere directs attention to the mode of life and diet, and suggests that the stimulating, heavy food and malt liquors so largely consumed may possibly produce effects upon the economy leading to the formation of the psoriatic eruption.

Great confusion exists at the present day in the nomenclature regarding this disease, some dermatologists adhering to the word Lepra, some using Psoriasis, while others have found a new name for it,—Alphos. In Germany this affection is universally called Psoriasis; but in England opinion is divided between the three names. Hence there is always a doubt what name to give, for fear of being misunderstood. Leaving the question of antiquity, as urged by some of the dissenters, out of the argument, it seems best to select the term which is most generally known and recognized the world over, in order that writers in all countries may be understood. In Prussia, Austria, Italy, France, Russia, and the other continental countries, the word used is Psoriasis, nor is any other word understood as designating this disease,—so that in England and America only does this useless confusion exist. The name, indeed, is of small import, as long as we know of what we are talking; but that one should be adopted and acknowledged is absolutely essential for the promotion of science. To call a disease Alphos and Lepra in one country and Psoriasis in another inevitably leads to confusion, and demonstrates clearly enough the disadvantage of an unsettled nomenclature. During my previous visit to this city, my attention was directed to a disease first described by Tilbury Fox under the name of Impetigo contagiosa. It is of an impetiginous or eczematous nature, as implied by its name, runs a course singularly its own, and differs from ordinary Eczema impetiginodes in its easy inoculability. It is a light disease, generally attacking children, having a short but definite course, and easily amenable to treatment. I have never noticed this particular form of disease on the Continent, and at the same time may state that its nature is not yet definitely understood. Elephantiasis græcorum, or Leprosy, is now and then met throughout England, and especially in London among the returned sailors and soldiers of the India provinces, who are doomed to carry this horrible malady throughout life. Active steps have recently been taken to investigate this singular and interesting disease, in the hope of arriving at some definite conclusion as to its nature; and, having had the whole material of the British eastern provinces to draw notes from, the report of the committee cannot fail to excite interest. The different Tinea diseases are all met with in England, Favus being by far the rarest. Mr. Erasmus Wilson is, I believe, the only dermatologist who denies that the Tinea affections are produced by a fungus. Mr. Wilson opposes the generally received view, and states that there is no vegetable parasite or fungus present at all in these diseases, but that what is commonly called fungus is "*granular degeneration*," conveying the idea of an arrest of development of the cell-tissue of the epidermis at its embryonic stage, and the production of a tissue constructed of crude and imperfect material. This explanation of the Nosophytodermata, as Mr. Wilson has termed the group, was advanced by himself some years ago; but, however ingenious the theory, it has received very few supporters.

In conclusion, it has been my aim in these letters to give a short and concise sketch of the subject as existing in the Old World, to present to those concerned the opportunity of taking a general view of what is going on, and of becoming acquainted with a few facts. Allusion to the syphilis hospitals and dispensaries has been purposely omitted in these few pages, considering the Midi, Lourcine, Lock, Berlin Charité, Vienna Allgemeines Krankenhaus, and the Naples Syphilocomia as each offering material sufficient for instructive remarks, and that to have referred to them casually would have been injustice. Leaving criticism, and the many points of interest that time and space have prevented speaking of, for other hands, I take leave of the subject, with the ardent wish that the future dermatology of America may go hand in hand with that of Europe, and that it may rapidly assume a rank equal to that which it holds in the countries of Plenck, Frank, Simon, Baerensprung, Alibert, Biett, Rayer, Willan, and Bateman.

REVIEWS AND BOOK NOTICES.

VON OPPOLZER'S VORLESUNGEN ÜBER SPEZIELLEN PATHOLOGIE UND THERAPIE. Bearbeitet und herausgegeben von EMIL RITTER VON STOFELLA. (Oppolzer's Lectures on Special Pathology and Therapeutics. Prepared for publication and edited by Dr. Emil von Stofella.)

No. II.

In a brief review of this work which appeared in the number of this journal for November 15, we called attention to its general excellence, and especially to certain points in the diagnosis and treatment of diseases of the heart and blood-vessels which we thought novel. In the second half of the first volume, which has just come to hand, the various diseases of the respiratory organs are considered; and it is our purpose in the present notice to give, so far as our limits will permit, an analysis of the author's views in regard to the pathology of the diseases usually classed together under the head of pulmonary tuberculosis. We make this selection not because we think the chapters devoted to this subject of pre-eminent merit, but because his views, nearly identical with those of Niemeyer and Waldenberg, are almost universally accepted in Germany, and, as it seems to us, only to a very limited extent in other countries. The excellent translations

of Niemeyer's works, and an admirable review of Waldenberg in the *American Journal of the Medical Sciences*, do not seem as yet thoroughly to have aroused attention to the fact—and we say it with a due sense of what we owe him for the introduction of the physical methods in the diagnosis of phthisis—that an unquestioning faith in Laennec's opinion that the peculiar lesion of phthisis consists in the deposition of tubercle, or of an adventitious product in the lungs, has done much to retard pathology. Oppolzer, in common with Niemeyer and Waldenberg, holds that the deposit of tubercle, so far from being a common occurrence in phthisis, is very rare, and that many cases of phthisis run their course without the patient becoming at any time tubercular. True tuberculosis may, it is true, be developed from pre-existing phthisis; but there are other conditions which generate it, and these will be more particularly referred to later in this notice. The peculiar caseous matter with which the lungs are infiltrated in phthisis is not, as has been generally supposed, softened and degenerated tubercle, but, in the greater number of cases, the degenerated product of an antecedent pneumonia. Now, the pneumonia which is most apt to be followed by this result is not that form to which we generally give the name of sthenic idiopathic pneumonia, and which the Germans call *Pneumonia crouposa*, but a form in which the exudation is not fibrinous, but is viscid and presents some similarity to mucus. In adults this form of pneumonia evinces a special preference for the upper lobes, and generally arises from the extension of inflammation from the bronchi to the air-cells. In children there has not been observed this tendency to localization, but any part may be invaded by it; it is especially liable to attack lobules affected with atelectasis, and, in fact, constitutes the most frequent form of lobular pneumonia. The morbid appearance of a lung affected with what is called *Pneumonia catarrhalis* may be thus briefly described. In the beginning, the inflamed part is of a violet or reddish-brown color, and its cut surface does not show a trace of granulation, but is compact and dense; later, the hyperæmia disappears, and the microscope reveals an increased rapidity of cell-growth; still later, a change of color takes place, and the inflamed part becomes yellowish-gray,—a change which is in large measure due to fatty degeneration of the newly-produced cells before alluded to. At this time the consistence of the lung will be found to be diminished. If the further progress of the case is towards health, the exuded materials will be absorbed, and the part will return to its former condition; but in many cases this favorable result does not take place, and the exudation, instead of undergoing the fatty degeneration, is transformed into a caseous substance; or, in other words, the caseous degeneration takes place. Now, although it is the catarrhal form of pneumonia which in the great majority of cases is the forerunner of phthisis, it is to be noted that the croupous form may occasionally, under certain circumstances, be followed by this disease; and perhaps still more rarely blood effused into the bronchial tubes and air-cells is capable of undergoing itself, and of inducing in the surrounding tissues, similar changes. Caseous degeneration may also affect cancerous masses, the contents of abscesses, and even miliary tubercles. In the beginning of the degeneration, as it affects, for instance, the exudation in catarrhal pneumonia, the cells and their nuclei, if a microscopical examination be made, will be found to have become contracted, and the cells to have a tendency to arrange themselves in masses,—effects, probably, of the withdrawal of water and of the mutual interference with nutrition which so large a number of cells must occasion. When the degeneration is still further advanced, a section of the inflamed part will be reddish-gray in color and present a dull, granular appearance; still later, yellow points, indicating commencing caseous degeneration, are to be seen, and the mass, even when much compressed, exudes only a small quantity of a tenacious, viscid, and gelatinous liquid. As the disease advances, the yellow points multiply, so that the part at last loses its red color, and the exudation, in consequence of softening, again becomes liquid, and may be eliminated. As the nutrition of the tissue of the diseased part has, however, suffered, excavations or vomicæ are frequently thus formed, although when originating in this way they rarely attain a very large size. Together with these changes there is observed a rapid development of connective tissue, which is found to have a great influence upon the further progress of the disease, whether it be favorable or unfavorable; for by it the ulcerated part of the lungs is separated from the healthy part, and in this way a limit is set to the further extension of the disease, and, as Oppolzer believes, to the absorption of the caseous matter and to the development of tuberculosis. On the other hand, if the development of connective tissue be excessive, we shall find the parts of the lungs affected to have a more than normal density, and in many cases to be traversed by fibrous bands. Of course, connective tissue developed in the lungs must sooner or later cause contraction; and in this way are to be explained the bronchial dilatation which so frequently occurs, and the depression of the supra- and infra clavicular spaces. The dilatations of the bronchi sometimes exist to a marked degree, and, it is believed, are frequently mistaken for excavation.

Tuberculosis or miliary tuberculosis is a disease distinct from the above, and is generally due to the absorption of some of the caseous matter previously described. It may be produced artificially by the inoculation not only of this caseous matter, or of the sputa or blood of a phthisical patient, but of various other substances; and the same result will be observed even after these substances have been treated with such powerful reagents that any vital or chemical property they may be supposed to possess must have been destroyed, provided, however, that their corpuscular elements have not been altered by the reagents. If, however, the corpuscles, under the microscope, present a shrivelled appearance or are broken up, the experiment will not be successful. Waldenberg has still further demonstrated that the inoculated elements are taken up by the lymph- or blood-vessels and after circulating with the blood may be deposited in various parts of the body, where, if they have been colored with aniline blue, they may be recognized even in the tubercles themselves. If we admit that tuberculosis follows the introduction of corpuscular elements from without, there can be no reasonable objection to the acceptance of the hypothesis that this *infection* or inoculation may sometimes be due to the absorption of corpuscular elements contained within the body, it matters not in what pathological process they may have originated. These, when absorbed, act as foreign bodies, and cause within the blood-vessels a derangement of the circulation, which may in some cases amount to partial stasis. As a consequence of this, there is an extravasation of a number of the white corpuscles of the blood, which generally carry with them these foreign bodies, and, collecting together in a mass, form the basis of a tubercle which is completed by the growth of a capsule of connective tissue around them. It will be seen that in this view tubercle is very analogous to the products of inflammation.

As we have already stated, the caseous degeneration of the lungs more frequently gives rise to tuberculosis than any other condition. Next in frequency stands caseous degeneration of the lymphatic glands; but it is to be recollected that tuberculosis may develop itself from caries or necrosis of bones, from suppurative coxalgia or otitis, or from diseases giving rise to ulceration, as ulcer of the stomach, ulcer of the larynx, and typhoid fever, or even from a previous attack of tuberculosis, the tubercle, like many other products, being itself susceptible of the caseous degeneration. It appears that the caseous masses are capable of undergoing the fatty degeneration, and in this condition may be absorbed without disadvantage to the person affected, the normal tissue of the lungs in these cases being replaced by connective tissue.

The manner in which phthisis begins is shown to be different, in many cases, from that described in the text-books. Thus it is said not to begin with a dry, hacking cough, but almost always with the symptoms of catarrh, and with more or less expectoration; and it is singular that, while it has long been recognized that certain diseases—as, for instance, measles and hooping-cough—are very frequently followed by phthisis, the special influence of the catarrh which is a necessary accompaniment of the latter disease, and by no means infrequent in the former, has been persistently ignored. In the same way it has long been known that workmen whose occupations require them to remain in rooms filled with dust are very apt to suffer from bronchial catarrh and from phthisis; but it has

occurred to but few that these two diseases stand in the relation of cause and effect.

It has been shown also by Niemeyer that the part played by hemorrhage in the history of phthisis has been entirely misunderstood. He has shown that it is by no means so grave a symptom as has been generally supposed, its influence even being, in a certain number of cases, salutary, and that, so far from being a symptom of fully-formed phthisis, it very frequently causes the development or aggravation of the disease. As has been already pointed out, the blood which remains in the bronchial tubes and air-cells undergoes itself the caseous degeneration and causes a similar change in the products of the inflammation excited by its presence. He has, moreover, asserted that an increase of fever and an extension of the disease almost invariably follow a hemorrhage. The writer of this notice, desiring to test the truth of this statement, and having under his charge two patients with phthisis in whom hæmoptysis frequently recurred, directed that thermometric observations should be made, morning and evening, in each case, for a few days after the occurrence of a bleeding. There was always an elevation of temperature; and it may be added that the physical examination of their chests was not wholly confirmatory of the correctness of Niemeyer's opinions.

Other points are, of course, more or less fully discussed by Oppolzer; and we regret that space will allow us to allude only to a few of them. In regard to the question whether phthisis and tuberculosis are hereditary diseases, Oppolzer replies that strictly neither of them can be so considered, and that all that can be said to be inherited is a certain predisposition or vulnerability (*Vulnerabilität*), which not only increases the susceptibility of the individual to the causes of bronchial catarrh, but also renders it more likely that its products will undergo caseous degeneration. The thermometer will afford us much aid in the differential diagnosis between the two diseases, tuberculosis and phthisis: thus, a uniformly high temperature, without evening exacerbations, indicates the former; the occurrence of fluctuations in the markings of the instrument, the latter. The sputa is much more apt to be abundant and to contain shreds of elastic tissue in the latter. Dyspnœa is more evident in the former, and a greater amount of interference with the respiration than can be satisfactorily accounted for by the physical signs is generally an indication that the patient who up to this time may have been only phthisical has become tubercular.

Of course, entertaining views of this character as to the pathology of phthisis, it is not surprising that some of the remedies recommended in its treatment are rather antiphlogistic in their action. Quinia and digitalis are both thought to be indicated, on account of the power which they possess of reducing the temperature of the body. In most respects, however, we do not find that the treatment is different from that in general use in this country.

Before closing this notice, we will call attention to a property which we find ascribed to ipecacuanha,—that of increasing the force of the contractions of the lung; and it is therefore to be prescribed whenever there is reason to believe this is deficient, especially if at the same time there is an accumulation of mucus in the bronchial tubes.

BOOKS AND PAMPHLETS RECEIVED.

From the Surgeon-General's Office: Annual Report of the Surgeon-General U.S.A., 1870. 8vo, pp. 10. Memorandum referring to Reviews and Notices of the Publications of the Surgeon-General's Office. 8vo, pp. 19.

Love of Science Perverted. Vivisection. By W. H. Drummond, D.D., etc. 12mo, pp. 22. Philadelphia, 1870.

Gynæcological Record. By J. E. Pinkham, M.D. 4to. Boston: James Campbell, 1870.

Materia Medica. By John B. Biddle, M.D. Fourth edition. 8vo, pp. 385. Philadelphia: Lindsay & Blakiston, 1870.

Medical and Surgical Reports of Boston City Hospital. First Series. 8vo, pp. 688. Little & Brown, Boston, 1870.

GLEANINGS FROM OUR EXCHANGES.

Contamination of Drinking-Water.—In the December number of the *Boston Journal of Chemistry* the editor calls attention to the fact that the same danger of lead-poisoning is attendant upon the use of tin-lined lead pipe as upon that of metallic double-lined water-pitchers. He states also that attention was called in that journal for July, 1868, to both these sources of danger.

Another article in the same journal points out that poisoning by salts of zinc can readily occur from the use of water which has been conveyed through the so-called galvanized iron pipe, or which has been collected from roofs covered with zinc or the "galvanized" iron, which, as is well known, is merely iron coated with zinc. This statement is fully supported by articles in foreign journals, the *Polytechnisches Journal*, Von Dingler advising that zinc roofs, or other surfaces exposed to the action of water subsequently to be used for drinking-purposes, should be coated with asphalt varnish, as the zinc will *invariably* and *rapidly* contaminate the water, especially when it is in contact with a metal less easily corroded than itself,—as iron. To this corrosion of the zinc is due the preservation of the iron which it covers. Hence the manufacturers probably need the inducement of their enormous profit—said to be about one thousand per cent.—to enable them with clear consciences to offer their wares as conduits for drinking-water.

Physiology of the Pancreatic Secretion.—M. Bernstein has published in the *Arbeiten aus der Physiologischen Anstatt zu Leipzig* some conclusions derived from experiments made, under the superintendence of C. Ludwig, upon the pancreatic secretion (*London Lancet*, November 19, p. 722). His views do not accord with those of Claude Bernard. He thinks a perfectly natural and healthy secretion can be obtained from dogs in which a permanent fistula of one of the ducts has been established; for he found the fluid thus obtained capable of converting starch into sugar, of emulsifying fat, and of digesting albumen, or, in other words, of converting it into peptone. The gland was found to be active in direct relation to the ingestion of food, the secretion increasing in quantity immediately after food had been taken, and attaining its maximum about two or three hours after a full meal, and then diminishing to the fifth or seventh hour, then slightly augmenting, and falling to its minimum at the fifteenth hour. Some of these results are similar to those already advanced by other authorities. The most interesting experiments were those instituted by M. Bernstein to investigate the influence of the nervous system on the pancreatic secretion. He found it greatly diminished in its flow when nausea was produced, while actual vomiting almost arrested it, the effect lasting for a considerable period. He also discovered, by irritating the pneumo-gastric, mechanically or otherwise, that any centripetal irritation of that nerve arrests the secretion,—that is to say, exerts an inhibitory influence on the activity of the gland.

Discovery of the "Piltz" or Fungus of Hooping-Cough (Letzerich. *Virchow's Archives*, March).—If the sputa of children in the catarrhal stage of hooping-cough is examined, small roundish or elliptical reddish-brown spores are found, which subsequently rapidly develop filaments. In the second stage of pertussis these filaments are found matted together, bearing at their extremities small round spores. These germs, unlike those which are found in diphtheria, do not penetrate the epithelial cells of the mucous membrane, but the mucous corpuscles are often filled with them. Letzerich cultivated these fungi on pieces of bread soaked in milk, and introduced them into the air-passages of young rabbits, after having performed tracheotomy. In from four to six days catarrhal symptoms were present, which lasted from eight to ten days. If the animal was killed at this time, the epiglottis, the folds of the mucous membrane in the larynx, and the trachea were covered with the germinating fungi: viz., the spider-web-like filaments, bearing on their extremities groups of small, colorless, glistening spores, matted together in the increased mucous secretion of the part, but not penetrating into the mucous membrane. In the second week the animal con-

stantly attempted to vomit, and finally the characteristic attacks of pertussis followed, with the forcible expulsion of tenacious mucus, which, microscopically examined, contained the germs already described. The animals generally showed symptoms of pneumonia, and on post-mortem examination it was found that in some cases the fungi had extended even into the alveoli of the lungs. Letzerich thinks that when the development of the germs is confined to the larynx of the child, the disease runs its regular course, while if the process extends to the alveoli, the dreaded pulmonary complications ensue.

MISCELLANY.

Drunkenness in New York.—Under this title we find in the number of the *Journal de Médecine Mentale* for November, 1869, the following passage:

"The *Journal de Médecine de Bordeaux* (October) obtains from an American newspaper the following statement: 'The asylum at Binghamton, opened five years ago, for wealthy inebriates, has received during that period 39 Protestant ministers, 8 magistrates, 40 merchants, 226 physicians, 540 gentlemen, and 1387 young women.'"

What American newspaper is responsible for this marvellous statement we are not told. Here, it is too ridiculous for belief; but abroad, where as little is known of our morals as of our geography, it will be received like gospel truth. Yet every statement in it, saving that of there being such an institution, is false. We have not their reports at hand, but we happen to know that two years ago not one woman was, or ever had been, an inmate of that institution; and we are quite sure that all the numbers are magnified at least tenfold.

Some malignant star seems to have presided over the fortunes of this institution. Though designed to meet a pressing want of society, guided by the counsels and supported by the abundant bounties of a host of benevolent men, and ided by a munificent revenue from the State, it has failed,—to all appearance, ignominiously failed. Twice it has been ravaged by fire, twice its head has been removed,—in one, if not in both cases, for gross incompetence,—and, though with a capacity for receiving hundreds of subjects, it was in operation several years before the whole number of admissions had reached one hundred.

The case excites grave reflections, and no one can be so indifferent to the matter as not to desire to know the causes of such a singular failure. The casual visitor who passes through its rooms and halls, its grounds and out-buildings, must have guessed pretty correctly at some of them; while those who endeavor, in a sober and thoughtful spirit, to understand the relations which such an institution should hold to habitual inebriety on the one hand, and to the principles and passions of human nature and the laws of the land on the other, must entertain something more than a suspicion respecting the rest. There is this useful lesson, however, to be derived from it: that, if such institutions are to succeed among us, their friends must avoid the mistakes committed in the experiment so fairly tried at Binghamton.

An Explanation.—Some one inserted a quack advertisement in each copy of the last annual circular of the Long Island College Hospital. The authorities of that highly respectable institution, learning that such was the case, have issued a card, perhaps unnecessarily, explaining that the trick was done without their knowledge. It would be well for other colleges to be on their guard against similar freaks of quackery. Is there any existing law which would touch the pocket of the perpetrator?

Election of Visiting Physician to the Philadelphia Hospital.—We regret to learn that Dr. Edward Rhoads has been compelled, owing to ill health, to resign his position on the medical staff of the Philadelphia Hospital. An election to fill the vacancy was held on Monday, December 19, resulting in the choice of Dr. H. C. Wood, Jr., well known to the medical world by his numerous valuable contributions to medical literature.

Physicians and Druggists.—An excellent article on the relations existing between physicians and apothecaries, by Dr. Burge, of Brooklyn, appeared in the *New York Medical Journal* for October, 1870. We should be glad to see this subject thoroughly ventilated, as well in the interests of the public as of the medical profession. It is a matter of ethics, and in all large cities, in our opinion, the neglect of it has been, is, and will be the source of grave abuses.

Consulting Physicians' Fees.—A Western cotemporary raises the question, "On whom rests the responsibility of paying the consulting physician?"—citing the case of an Irish surgeon who claimed that the physician who called him in was liable. It seems only common sense that the party for whose benefit the consultation is held—the patient—should bear the expense. But should the patient have objected to the consultation beforehand, or consented to it on the supposition that his ordinary attendant desired it merely for his own satisfaction, he might reasonably demur to being charged for it.

A case recently occurred in New York, in which Dr. Gurdon Buck brought suit against the well-known hatter, Mr. Amidon, for services rendered at the request of Mr. A. to his (Mr. A.'s) brother; the technical point raised being that Mr. A. merely acted as a messenger, upon a telegram sent by the attending physician of the patient from Groton, Connecticut. But the doctor said he looked out Mr. A.'s name in the New York City Directory, and, finding reason to believe him a responsible person, obeyed his summons. We are not informed of the issue of the case.

Correction.—We cheerfully make the following extract from the *Boston Medical and Surgical Journal* of December 1:

"Medical Benevolence.—Our cotemporary, the *Medical Times*, is in error in stating that the 'New York Physicians' Aid Association' is the only one in this country having for its object the distribution of charity to needy members of the profession and their families. The Massachusetts Medical Benevolent Society was formed in 1857, and has been in successful operation ever since. It now numbers about one hundred and forty members. Any Fellow of the Massachusetts Medical Society in good standing may become a member on receiving the approval of the Council."

Mr. T. Holmes.—We much regret to see it stated that this London surgeon, so widely and well known as the editor of the "System of Surgery" and author of the volume on "The Surgical Treatment of the Diseases of Children," has lost the sight of one eye by an attack of ophthalmia.

Smallpox in Brooklyn.—The correspondent of a daily paper says, under date of December 8, that there are eighty-six patients in the regular Smallpox Hospital in Brooklyn, besides eighteen beds, "which are all overcrowded," in the dead-house.

It would seem that the mortuary statistics of some of the German hospitals can almost be made out beforehand, so accommodating are the patients. The veracious correspondent of the New York *Herald* says:

"When a German soldier falls ill, it seems he is expected to die as soon as possible and take himself out of the way. In some hospitals all the patients die every night, and the beds are emptied of the dead and immediately filled with new sick."

Examination by Experts.—In a recent trial in New York, Dr. Sayre being accused of malpractice, an application was made by his counsel for an examination, by experts, of the actual condition of the plaintiff. After much opposition, the demand was acceded to; the result was that the charge could not be sustained, and the plaintiff was nonsuited. This most desirable precedent, if followed, will be of great benefit to the cause of justice, since it shields the profession on the one hand from vexatious and groundless prosecutions, and on the other from the imputation of shirking a fair inquiry into the actual merits of the cases in which they are attacked.

Negative Evidence as to the Value of Vaccination.—The *Detroit Review of Medicine and Pharmacy* says, "In Russia vaccination is not compulsory. According to official returns, 10,350,000 persons have died of smallpox in that country during the last seventy years. What say our friends of the Anti-Vaccination League to this?"

Divorces in America.—We find the following in the *Northwestern Medical and Surgical Journal:*

"Dr. Charles Drysdale, an English physician of eminence, who is a strong advocate of the limitation of offspring and facility of divorce, says, in a letter to the *Medical Press and Circular*, 'I hear from Mr. Conway, a distinguished American literary man in London, that since the establishment of the facility of divorce in Indiana, United States, there has been hardly any prostitution in that State, and that comparatively few persons avail themselves of the six months' notice for incompatibility granted by the laws.'

"Whence Mr. Conway derived the above remarkable statistical information we cannot guess; but anything more at variance with the commonly-received impression on this side of the Atlantic, it would be difficult to conceive. The actual extent of prostitution in the towns of Indiana we have no means of ascertaining accurately; though, from what we can learn, it would seem to be certainly no less than in other communities; while in the matter of applications for divorce, either the law reporters of the local press or Dr. Drysdale's informant must be sadly in error. Perhaps, however, Mr. Conway spoke in a vein of unappreciated irony, or, noting his listener's unsophistication, yielded to the American proclivity for hoaxing. Under any circumstances, we would advise Dr. Drysdale not to rest his sociological theory on such a foundation without further investigation of statistical facts."

The credulity of foreigners, and especially of the British, in regard to things in this country, is truly surprising. In the instance just quoted, much harm might be done by the assumption of the truth of a vague and unauthentic statement, and the use of it in support of a most dangerous social policy.

A much more amusing specimen of credulity is given by Dr. Mapother, who, in an address on American medicine, related an anecdote of a practitioner who compelled another to consult with him by producing a pair of revolvers (which he cheerfully called his "diplomas") and making an instant duel the alternative. A man so decided in his plans of action would scarcely feel the need of consultation with any one.

Mortality of Philadelphia.—The following statements are condensed from the Health Office Reports:

	For the week ending Dec. 10.	Dec. 17.
Diseases of the Brain and Nervous System	41	29
Diseases of the Organs of Circulation and Respiration	100	112
Diseases of the Abdominal Organs	13	16
Zymotic Diseases	19	23
Constitutional Diseases	6	17
Casualties	8	3
Stillborn	13	23
Unclassified	42	43
Adults	129	130
Minors	112	136
Totals	241	266

ARMY NEWS.

We have received from the Surgeon-General's Office the following highly important order relative to the construction of army hospitals:

WAR DEPARTMENT,
Adjutant-General's Office,
Washington, D.C., November 23, 1870.

General Orders, No. 118.

The following regulations relative to hospitals for the army are published for the information of all concerned:

1. Regulation Hospitals will be of the plans this day approved, and will, when specially authorized by the Secretary of War, be erected at permanent posts. In the construction of a new post, the erection of the hospital shall go on *pari passu*, when practicable, with that of the storehouses and men's quarters.

2. Provisionary Hospitals are such as are erected at temporary posts. In future no such building shall be erected or occupied for hospital purposes until the opinion of a medical officer has been obtained in writing as to the merits of the site and arrangements; and if the Commanding Officer differ from this opinion he shall return the same to the medical officer, with his reasons for so doing endorsed thereon.

3. Requests for the erection of Regulation Hospitals will be made by the medical officer through the Commanding Officer. The location of the building, the proposed material, the exact modifications of the regular plan, if any, which are proposed, and the estimated cost, are to be stated in the request. The Commanding Officer will endorse his opinion upon the request and forward it to Department Headquarters. The Department Commander will obtain the views of the Medical Director and Department Quartermaster, and forward the papers to the War Department, with his own opinion endorsed thereon.

4. When the erection of an hospital has been authorized, the officer charged with its construction will consult, as to minor details, with the medical officer of the post, who will act as inspector of the work on the part of the Medical Department.

5. When the building is reported ready for occupation, the medical officer will report in full as to its merits to the Surgeon-General, through the Medical Director, and shall furnish a copy of the same to the constructing officer.

6. Copies of all plans, estimates, and orders connected with the erection or repairs of post hospitals, whether temporary or permanent, will be furnished to the Medical Department by the officer making the same, and when furnished to a post surgeon or a medical director, they will at once forward them, with their comments, to the Surgeon-General.

7. The Surgeon-General will in future furnish to the Quartermaster-General, in time for his annual estimates, a statement of the number and size of hospitals, and of the amount of hospital repairs, which will probably be required for the ensuing year, with the estimated cost of the same.

8. The plans and specifications for post hospitals approved this day will form the basis of action until further orders in regard to this subject.

By order of the Secretary of War.

E. D. Townsend, *Adjutant-General.*

CIRCULAR No. 3.*

WAR DEPARTMENT,
Surgeon-General's Office,
Washington, D.C., November 23, 1870.

The following are the approved plans and specifications referred to in the last clause of the above order:

Approved Plan for a Regulation Post Hospital of 24 Beds. (See Fig. A.)

This hospital consists of a central administration building and two wards arranged as wings.

The wing for each ward will be 45 feet long, 24 feet wide, and 15 feet high in the clear from floor to ceiling. For very cold climates, the height may be reduced to 12 feet, in which case the length will be increased to 50 feet.

* The numerous references in the text are to plates accompanying the original circular, which we are unable to reproduce. The cuts here presented display the front elevation of the hospitals described.

Attached to each ward, at the outer end and behind, will be a room for the earth-closet, 9 feet square.

The administration building will be 35 feet front by 39 feet deep, and two stories high, with a back-building 40 by 14 feet. Each story of this building will be 12 feet high from floor to ceiling.

A veranda, 10 feet wide, will surround the hospital, with the exception of the kitchen.

In hot climates the wards will be detached from the main building, only remaining connected with it by the veranda, which will thus entirely surround the ward. The back-building will be separated in like manner.

The plan of the first floor, the designations and dimensions of rooms, and the position of doors, chimneys, windows, and beds, are shown in Fig. 1, Plate I.

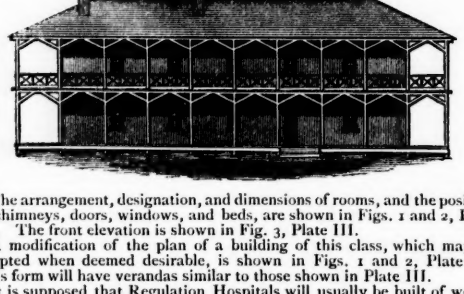
The plan and dimensions of the second floor are shown in Fig. 2, Plate No. I. The front and side elevations of the building are shown in Figs. 1 and 2, Plate II.

APPROVED PLAN FOR A REGULATION POST HOSPITAL OF 12 BEDS.
(See Fig. B.)

Designed especially for malarious regions and southern climates where it is desirable that the ward shall be on the second story.

This hospital will consist of a building two stories high, with a veranda extending entirely around the building, 10 feet wide.

FIG. B.



The arrangement, designation, and dimensions of rooms, and the position of chimneys, doors, windows, and beds, are shown in Figs. 1 and 2, Plate III. The front elevation is shown in Fig. 3, Plate III.

A modification of the plan of a building of this class, which may be adopted when deemed desirable, is shown in Figs. 1 and 2, Plate IV. This form will have verandas similar to those shown in Plate III.

It is supposed that Regulation Hospitals will usually be built of wood; but brick or stone may be used when deemed more economical.

In all cases the ground floor must be raised 18 inches from the ground, with arrangements for free ventilation underneath it in warm weather. In warm climates and malarious regions the ground floor will be raised at least 3 feet above the ground, on piers or open arches.

When built of wood, these hospitals should be balloon frames, covered first with rough boarding, then with tarred paper, and clapboarded over the whole.

The walls and ceilings of all rooms are to be lathed and plastered.

The floors are to be of the best quality of clear plank, 3 inches wide, of hard pine or other hard wood, tongued and grooved, and neatly fitted.

The roofs to be fitted with gutters and eavespouts leading to a good cistern, to be constructed in connection with the hospital.

In northern climates, when the ground will permit of it, a good cellar will be constructed under the kitchen.

The windows of the wards will be 10 by 3 feet, and reach within one foot of the ceiling. Both sashes will be made to slide with weights and pulleys and be neatly fitted. (To the top of the upper sash, for its whole width, will be attached a light louver board, one foot wide, to throw the entering air towards the ceiling.)

At posts where the mean temperature for the winter is liable to fall below 28° F., the ceiling of the ward being 12 feet from the floor, the windows will be double, and 8 feet high by 3 wide.

The windows of the administration building will be 7 by 3 feet, and be fitted with outside shutters.

The dispensary is to be neatly fitted with shelving, drawers, and counters; the store-rooms with shelving, which, for bedding and clothing, will be open racks with slat bottoms.

The dimensions given each room in the plans must be attained in the clear.

The arrangements for ventilation of the wards will vary according to climate.

On the Gulf coast and in Arizona the wards will not be ceiled, and will have ridge ventilation their whole length.

At all posts where continuous artificial heat is required for three months in the year, the walls will be ceiled and have boxed openings carried from the centre of the ceiling to the ridge for summer ventilation. There will be two of these openings, each 10 feet long by 2½ feet wide, and 10 feet apart.

In winter the heating will be effected by a ventilating double fireplace, the form of which is shown in Figs. 1, 2, and 3, Plate V.

It consists essentially of two open fireplaces, placed back to back in the

FIG. A.

centre of the ward and enclosing an air-chamber between them. This air chamber communicates below with an air-box, 18 inches square, which passes underneath the floor of the ward from side to side, and opens above into the wards by two pipes controlled by registers.

The pipe from this ventilating fireplace, 8 inches in diameter, passes up through a close-fitting earthen tube or collar in the ceiling. One foot above the ceiling it enters a shaft or jacket, about 24 inches in diameter, which pierces the roof, and, extending four feet above it, is covered with a sheet-iron cap, which in its turn is pierced by the stove-pipe, which will be capped in like manner. This shaft through which the stove-pipe passes should be of clay or earthenware; but if a wooden shaft is used, a sheet-iron tube, 18 inches in diameter, should intervene between the stove-pipe and the wooden tube. At each end of the ward, and two feet from the centre, will be an opening in the ceiling, one foot square, from which an air-box will pass to a box enclosing the lower mouth of the tube surrrounding the stove-pipe. The heat of the pipe above the ceiling will thus create a continuous upward current in the surrounding tube, which will be supplied by the vitiated air from the ward through the air-boxes.

The arrangements above described are shown in Figs. 4 and 5, Plate V.

The Surgeon-General will indicate such modifications of this plan of ventilation as may seem desirable on account of locality, etc., when the plans for each hospital are submitted to him.

A ventilating shaft, 6 inches square, will be placed in each earth-closet room, and the lamp or gas-burner of this room should be directly beneath this shaft. The chimney of the kitchen will be built with two flues, one of which will open near the ceiling, and be used exclusively for ventilation.

In hospitals built of brick, the walls will be double, a space of three inches being left between the inner and outer walls, the two walls being securely tied together with bricks, so arranged as to admit of a free circulation of air between them.

Other sizes of hospitals may be constructed, when approved by the War Department, by suitable lengthening of one or both wards.

Fig. 3, Plate IV., gives a ground plan for a Provisionary Post Hospital of 12 beds, to be constructed of logs, adobe, or lumber, as the case may be or as the circumstances may permit. This plan is given simply as a guide to be followed in cases which do not admit of delay, and for use of temporary encampments.

At all permanent posts established in future, a proper hospital will be constructed upon the plans given above for Regulation Post Hospitals.

J. K. BARNES, *Surgeon-General U. S. Army.*

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U. S. ARMY, FROM DECEMBER 4, 1870, TO DECEMBER 17, 1870, INCLUSIVE.

COOPER, G. E., SURGEON.—By G. O. 28, C.S., Headquarters Department of the Columbia, announced as Medical Director of that Department.

MAGRUDER, D. L., SURGEON.—By S. O. 224, C.S., Headquarters Department of the Missouri, granted leave of absence for *thirty days*, with permission to apply for an extension of *sixty days*.

GHISELIN, J. T., SURGEON.—By G. O. 28, C.S., Headquarters Department of the Columbia, relieved from duty as Acting Medical Director of that Department.

CLEMENTS, B. A., SURGEON.—Returned to the post at Jackson Barracks, New Orleans, La., Dec. 6, 1870.

TILTON, H. R., ASSISTANT-SURGEON.—By S. O. 224, C.S., Headquarters Department of the East, granted leave of absence for *thirty days*, with permission to apply for an extension of *sixty days*.

MCMILLIN, THOMAS, ASSISTANT-SURGEON.—By S. O. 181, C.S., Headquarters Military Division of the Pacific, granted leave of absence for *sixty days*, with permission to apply for an extension of *four months*.

KOERPER, E. A., ASSISTANT-SURGEON.—By S. O. 151, C.S., Headquarters Department of Texas, the leave of absence granted him in S. O. 129, C.S., Headquarters Fort Clark, Texas, is extended *fifteen days*.

O'REILLY, R. M., ASSISTANT-SURGEON.—By S. O. 177, C.S., Headquarters Department of California, confirms telegram authorizing him to delay *fourteen days* in reporting at Headquarters Department of California.

O'REILLY, R. M., ASSISTANT-SURGEON.—S. O. 171, C. S., Headquarters Military Division of the Pacific, the permission to delay *fourteen days* reporting at Headquarters Department of California is extended *forty days*.

DICKSON, J. M., ASSISTANT-SURGEON.—By S. O., dated Headquarters Department of the Platte, Nov. 15, 1870, granted leave of absence.

MINOR, W. C., ASSISTANT-SUUGEON.—By G. O. 119, War Department, Adjutant-General's Office, Nov. 25, 1870, retired from active service.